January 2018

RBC WEALTH MANAGEMENT

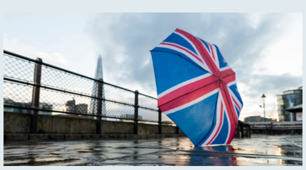
Global Insight

Perspectives from the Global Portfolio Advisory Committee

A less taxing situation

Sweeping tax relief will reshape the U.S. corporate environment, boosting prospects for earnings, the economy, and shareholders.

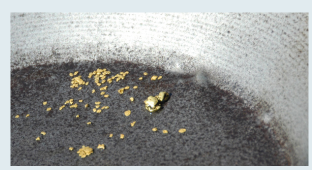
Kelly Bogdanov | Page 4



Focus article
Brexit: Put to the test

Global equity
Synchronicity

Global fixed income
A few of our favorite things



Commodities
All that glitters in 2018 … is not gold

For important and required non-U.S. analyst disclosures, see page 25.

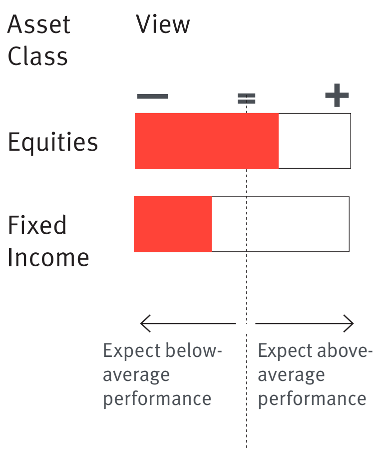
RBC Wealth Management

Table of contents

All values in U.S. dollars and priced as of market close, December 29, 2017, unless otherwise stated.

RBC’s investment stance

Global asset views



See “Views explanation” below for details

Source - RBC Wealth Management

Equities

- With a further uptick in December, global equities returned handsome gains in 2017. We expect 2018 to be another rewarding year, but it would be asking a lot for the path to be as “wobble-free” as the year just past was for most major markets. Setbacks cannot be ruled out.
- Corporate earnings remain robust in most regions, and consensus expectations are being upgraded in Japan and the U.S., thanks to better growth prospects and tax reform, respectively. Valuations, though less attractive than they have been, could extend further in some regions, with mainland Chinese stocks being a significant exception. We suggest investors continue to hold a modest Overweight position in global equities.

Fixed Income

- The U.S. yield curve flattening continued to be a topic of focus as the 10-year Treasury yield closed the year much where it had started, while short-term rates have been propped up by expectations of Fed rate hikes in 2018. Avoiding an outright inversion of the curve, often a precursor of recessions in past cycles, should limit the Fed to two rate hikes in 2018 versus the three currently expected by the market, in our view.
- Elsewhere, while economies are growing, inflation remains subdued in most cases, and we expect central banks to merely reduce accommodation (Europe), or keep rates on hold (Canada, the U.K.).
- Nevertheless, with valuations less attractive, we prefer to maintain our Underweight stance in this asset class.

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.

Focus article

A less taxing situation

The landmark U.S. tax reform bill, with massive corporate tax relief as its centerpiece, should add fuel to the U.S. economic growth engine. And with corporate earnings poised to meaningfully jump, U.S. equities should have a firm backbone of support. While some concerns could pop up in the out-years, on the whole, the changes will likely allow companies—and shareholders—to prosper.

Kelly Bogdanov
San Francisco, United States
kelly.bogdanov@rbc.com

Major U.S. tax code overhauls are rare events, as they tend to occur only once every two or three decades. The recently enacted $1.5 trillion bill, with its substantial business tax cuts and moderate reductions in individuals' tax burdens, is the most sweeping since the Reagan era. From our vantage point, the changes will be positive for the U.S. economy and equity market.

Key benefits for equity investors include:

- U.S. GDP should rise roughly half a percentage point more than it would have for at least the next two years, according to our economists. For example, instead of GDP growing by 2.5%, it could grow by 3.0% annually.
- The S&P 500 and other major indexes should see a meaningful boost in earnings growth.
- Industries with a large share of domestic revenues and high capital spending levels should capture the greatest incremental increases in free cash flow.
- Small-capitalization public companies and small private firms should see the biggest declines in tax rates as they previously paid the highest effective rates.
- The provision that allows companies to immediately deduct 100% of certain business expenses seems underappreciated. This can provide a big boost to cash flow.
- Momentum for business capital spending—a key component of GDP—should improve due to immediate deductibility.
- U.S.-based multinational firms that had high tax rates will be able to compete more effectively with low-taxed foreign rivals.
- Many companies will likely use the extra cash flow to initiate or increase stock buybacks, hike dividends, embark on acquisitions, and/or grow their businesses by other means—all of which can be positive for shareholders.

Market gets a head start

Some of this good news is likely priced into the stock market. It is well known for incorporating positive developments ahead of time, especially when they are well telegraphed, and this is no exception.

For example, as it became clearer the tax package could become a reality, the S&P 500 surged 5.0% from mid-November through the latter part of December just before the bill passed both chambers of Congress. Additionally, the market's jump immediately following the 2016 presidential election was partly due to optimism about tax cuts and the Trump administration's other pro-growth initiatives.

Yearning for higher earnings

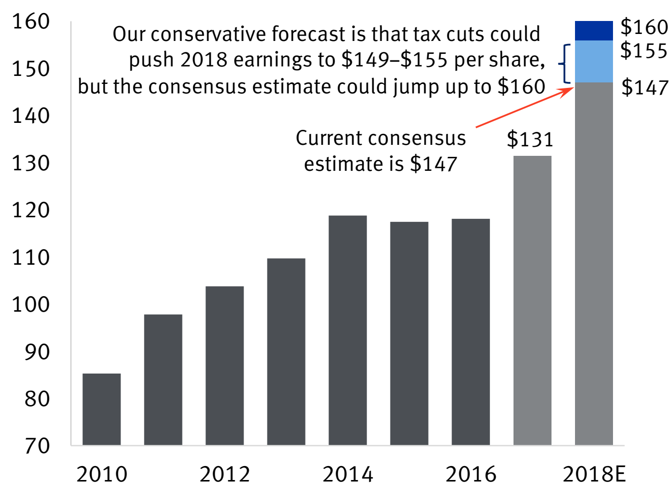
Even though the tax cut bill has already helped push the U.S. equity market higher, its full effect may not be completely factored in.

The positive corporate profits and cash flow impacts—the meat on the bones of the tax cut package—won't become fully visible until companies begin to incorporate the tax code changes into their 2018 earnings estimates. These upward earnings adjustments are not yet completely embedded into the consensus forecast, in our view, and therefore the positive impact on profits may not be totally discounted by the market.

Earnings growth could jump meaningfully in 2018 because the corporate tax rate has been slashed substantially.

Instead of the S&P 500 growing earnings at our 7.5% y/y estimated rate without tax cuts, we anticipate profits could expand 14%–18% or more with tax cuts in 2018. This higher growth range would represent $149–$155 per share in earnings, above the current $147 consensus forecast compiled by Thomson Reuters I/B/E/S. But the consensus forecast could end up rising even higher—potentially up to $160 per share, according to our national research correspondent.

S&P 500 annual earnings per share and estimates in USD



For 2018, tax cuts should boost earnings beyond the current consensus estimate.

Source - Thomson Reuters I/B/E/S, RBC Wealth Management; 2017 and 2018 light gray data represent current consensus estimates

Earnings growth could jump meaningfully in 2018 because the corporate tax rate has been slashed substantially to 21% from 35%. This takes the U.S. from nearly the highest statutory rate in the world (only a handful of tiny economies have higher rates) to a rate well below the G7 and G20 averages, slightly below the European Union, and just a tad above the Asia average, according to the Tax Foundation.

If higher earnings growth pans out as we anticipate or is even stronger, it could push the market's valuation down to a more reasonable level (see table on next page). In any of these scenarios, the market's valuation would have room to expand in 2018 and potentially beyond, which is supportive of stock prices.

A less taxing situation

If higher earnings growth pans out as we anticipate or is even stronger, it could push the market's valuation down to a more reasonable level.

Forward price-to-earnings (P/E) scenarios based on full-year 2018 earnings estimates

Scenario	Earnings per share	P/E ratio
Our previous estimate without tax cuts	$141	19.0x
Current consensus estimate	$147	18.2x
Our new conservative estimate range with tax cuts	$149– $155	17.9x 17.2x
Where the consensus could possibly jump up to	$160	16.7x

Source - RBC Wealth Management, Thomson Reuters I/B/E/S; data based on S&P 500 closing price of 2,673.61 on 12/29/17

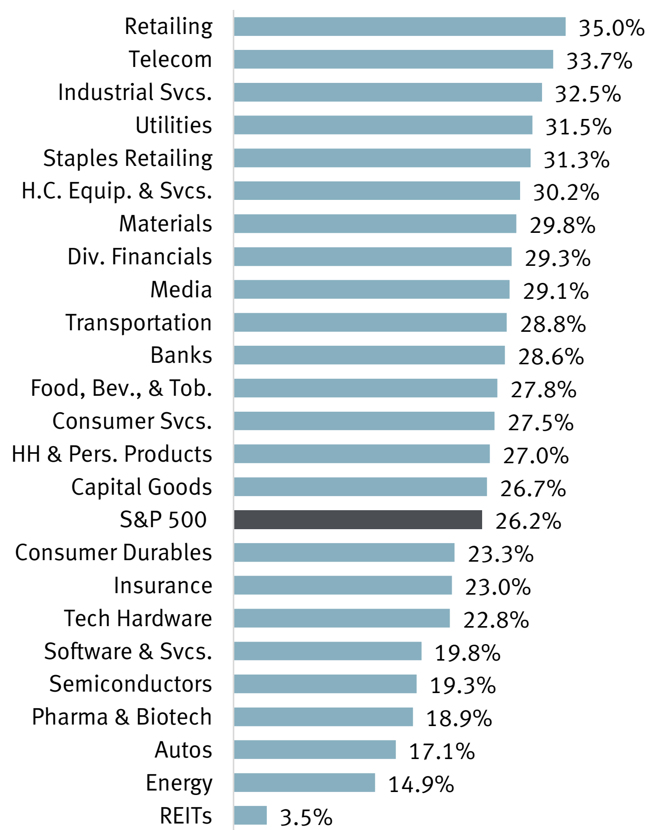
Any way we slice it, tax cuts should lower the U.S. market's valuation.

Domestically speaking

Domestically focused industries, small-cap firms, and companies with high capital spending could see their tax rates drop and cash flows increase by the greatest magnitudes.

Among large-cap companies, many are in the retailing, telecommunications, industrials, utilities, and financials industries, and the list goes on (see chart).

Effective tax rates of select industry groups (before tax cuts)



Source - National research correspondent, Thomson Financial, FactSet, Standard & Poor's; data based on 3-year trailing dollar weighted effective tax rate; data through 12/29/17

Industries with the highest tax rates should benefit from tax cuts.

For example, without tax cuts, bank industry earnings seemed set to rise roughly 9% y/y in 2018. But with tax cuts, RBC Capital Markets believes the average growth rate could jump to 15%–19%.

As companies adjust their 2018 forecasts for tax cut benefits in coming months, investors will have a better picture of the biggest potential winners.

Concerns in the out-years

Even with all of the benefits for companies and equity investors, we would be remiss not to acknowledge the tax cut package is no panacea.

It could end up adding a trillion or so dollars to the national debt over time—a manageable, but still unwelcome amount given the federal debt-to-GDP ratio already ranges from 77% to 104%, depending on how it's calculated.

Companies will have additional flexibility to grow their businesses, compete globally, and prosper—to the benefit of employees and shareholders.

The tax cut package probably won't solve the country's wage growth or income disparity challenges in one fell swoop. Wages have been drifting moderately higher recently, but our U.S. economist doesn't expect the corporate tax cuts to drastically change the trajectory.

The tax reforms include some provisions that create uncertainties, or could turn out to be negative, for high-income taxpayers in high-tax states. While the legislation minimized the pain of the alternative minimum tax, at this stage it's unclear if that will fully or only partially offset the loss of a portion of state, local, and property tax deductions for these taxpayers, or if states can develop "workarounds."

Some economists are questioning or criticizing the timing of the tax cuts. They argue that fiscal stimulus of this magnitude should come when the economy is struggling or attempting to gain its footing, not when it is at the strongest of the recovery cycle like now. While we are sympathetic of this theoretical argument, we are less bothered by the timing because the GDP growth trajectory of this recovery cycle is much lower than normal and the tax cut stimulus may not even push the economy back to the strong GDP growth rates reached in previous recoveries.

More troubling to us, the benefits of this tax bill could unwind in the out-years. A number of the provisions are temporary so they would need to be reauthorized by a future Congress and president or they will expire. If lawmakers are unwilling, tax cut tailwinds could become tax hike headwinds over time.

Lower taxes, higher expectations

Even with the bill's shortcomings, we cannot ignore the fact that the most significant tax cut package in 31 years has been enacted into law, a meaningful portion of which should benefit publicly traded companies. The earnings and dividend streams of U.S. companies seem set to rise due to tax cuts and the economy's underlying strength. The legislation should add to an already improving economic foundation and provide U.S.-based companies with additional flexibility to grow their businesses, compete globally, and prosper—to the benefit of employees and shareholders.

Focus article

Brexit: Put to the test

The U.K.'s economic and political landscapes remain enveloped in a fog that shrouds the outlook for U.K. financial markets. Economic prospects are underwhelming due to Brexit uncertainty, while a weak and vulnerable government could face the challenge of early elections, throwing another spanner in the works. We advise prudence and reiterate our Underweight stance for U.K. equities.

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

The stress of divorce

For an open economy, where exports represent a hefty 31% of GDP and which enjoys full employment, the U.K. underwhelmed in 2017, particularly given the synchronised global recovery backdrop. This is likely to continue as the uncertainty related to Brexit seeps in.

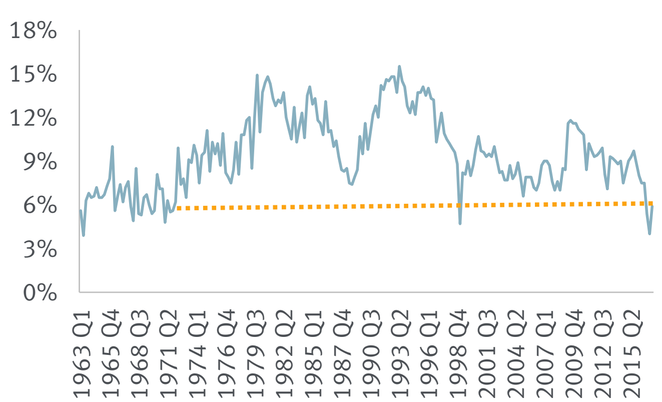
After expanding by just 1.5% (RBC Capital Markets estimate) in 2017, RBC Capital Markets forecasts the U.K. economy to grow a meagre 1.4% for 2018, among the weakest growth rates in the G7. Despite disappointing growth, the Bank of England (BoE) has begun tightening monetary policy so as to tame the now 3%+ inflation induced by the post-referendum slide in the pound. Its first hike in a decade boosted the bank rate to 0.5%.

Inflation should subside from now on thanks to base effects, but the BoE's recent messaging suggests it will increase rates by another 0.5% over the next three years. RBC Capital Markets believes this will largely be back-ended and looks for no increase in 2018 as Brexit uncertainty weighs on economic activity.

High inflation and subdued wage growth have eroded household disposable income. Consumers have stepped back somewhat. The household savings ratio, recently at an 18-year low, is likely to move higher with house price inflation now deteriorating, providing little reason to be optimistic about consumer outlays ahead.

U.K. household savings ratio is very low

Household savings as a % of disposable income



Source - RBC Wealth Management, RBC Capital Markets, Haver Analytics; data through Q2 2017

The low household savings ratio leaves the economy vulnerable to a further decrease in consumption.

The risk of early elections and of a Labour government that would likely focus on an aggressive public spending agenda is underestimated, in our view.

Investment is not offsetting weak consumption. Business spending has suffered over the past 18 months, and whether it picks up will depend on how Brexit negotiations proceed. It is generally believed that unless there is more clarity by the end of Q1 2018 around the future trade relationship between the U.K. and the EU, businesses will restrict domestic investment projects.

Meanwhile, the government has scaled back austerity plans, postponing its deficit targets, though RBC Capital Markets does not expect government spending to add much to economic growth in 2018.

The pound gained 10% against the USD in 2017, propped up by monetary tightening expectations and the possibility Brexit negotiations would move on from settling "divorce issues" to discussing the future trade relationship.

Views are polarised about sterling's prospects for 2018—the currency has the widest range of forecasts of any G7 country. On the one hand, a tighter monetary policy to control inflation might prop up the currency. On the other, the pound could be pressured by a weaker economy, or by inflation subsiding and removing the need for monetary tightening, or by challenging Brexit negotiations. RBC Capital Markets is in the latter camp, expecting renewed currency weakness in 2018.

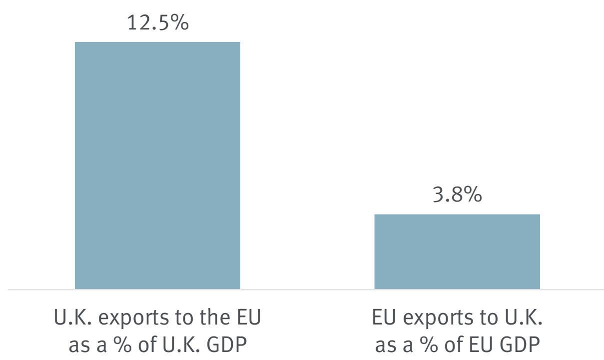
Between a rock and a hard place?

Brexit-related risks are well flagged, though the risk of early elections is underestimated, in our view. A Labour government that would likely focus on an aggressive public spending agenda, including nationalising certain industries, could be voted in.

Brexit is going ahead despite apparent economic costs in the short term. Polls suggest little regret concerning the referendum result. Having spent nine months settling the issues related to the separation of the U.K. from the EU, the U.K. has been given the go-ahead to start negotiations regarding a transition agreement and the terms of the new relationship.

This upcoming phase will likely prove even more challenging. The stakes are very high for the U.K. for whom the EU is a much more important trade partner than the U.K. is to the EU.

Exports as a percentage of GDP greatly differ

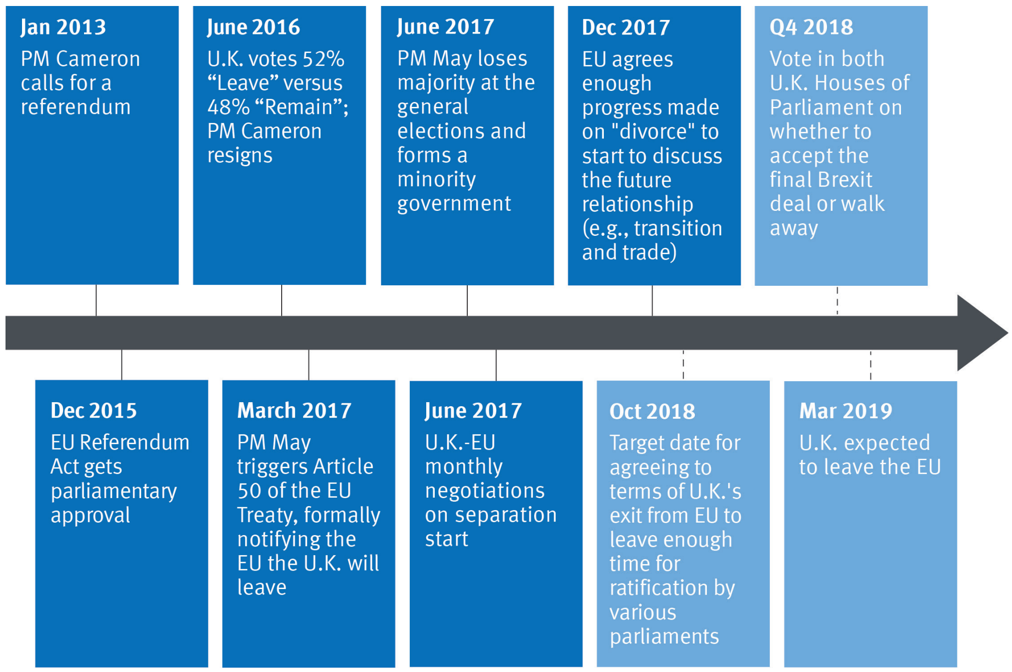


U.K. exports to the EU are much more significant to the U.K. economy than the other way around.

Source - RBC Wealth Management

Complicating matters further, U.K. politicians are not in agreement as to what they are trying to negotiate and what, if anything, would replace the EU single market and customs union memberships. The clock is ticking. Negotiations need to be completed within nine months to leave enough time for any new agreement to be ratified by parliaments in the U.K. and EU before the U.K. leaves the EU on March 29, 2019.

Brexit timeline



Source - RBC Wealth Management, RBC Capital Markets

Our base case is that the U.K. will aim for a two-year transition period after the set March 2019 exit date to extend the status quo.

Given the stakes, there is a non-negligible probability of a breakdown in talks and of the economically damaging “hard Brexit” scenario materialising. Under such an outcome, the U.K. would lose tariff-free access to its largest export market and have to fall back on WTO rules. This would entail not only tariffs, but also having to meet the burdensome cost of abiding by complex “rules of origin” regulation. A hard Brexit scenario would be negative for the pound and would probably result in higher Gilt yields.

Our base case is that the U.K. will aim for a two-year transition period after the set March 2019 exit date to extend the status quo, and defer the settling of the details of the future relationship to a later date.

The second risk, with arguably a wider range of consequences, is the spectre of early elections. Prime Minister Theresa May’s government is weak with a razor-thin working majority of only 13. With Brexit negotiations dividing the government, there is a material probability of a general election before the end of 2019, or some two years before elections are due. A Labour Party win is a real possibility, in our view, given Labour’s surge in the polls since mid-2017.

The Labour Party has shed its centre-left stance and now backs a programme of nationalisations and has suggested an additional £500B in spending to be financed by higher Gilt issuance, which is likely to increase both inflation and Gilt yields.

The party is deeply divided on Brexit, and so far has had an ambiguous stance on the matter, though it has not opposed the government's position.

A wide array of outcomes is possible for financial markets. On the one hand, should Labour win a sweeping majority and push for a hard Brexit, U.K. financial markets would almost certainly come under pressure. This scenario is not very likely, but U.K. politics have proven to be unpredictable of late.

In a more benign scenario, Labour would emerge victorious but without a majority of seats, making it more difficult to pass extreme measures. Should it also shift its stance on Brexit and opt for a Norway-style agreement where access to the single market is retained, it is conceivable the pound and economy could both strengthen. There are many other potential permutations to be considered.

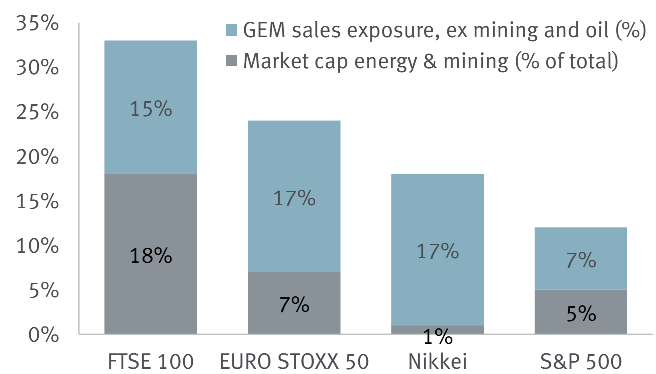
U.K. equities: Fog of uncertainty

In our view, U.K. equities present a less attractive proposition than those of other regions despite more appealing valuations.

In our view, U.K. equities present a less attractive proposition than those of other regions despite more appealing valuations. U.K. equities have lagged in 2017 and we think this is set to continue in 2018 given the unappetising stew of severe political risk and a comparatively weak economy.

U.K. equities look especially cheap compared to other markets, particularly on a price-to-book value basis, partly due to the structural derating of banks and commodities. On a forward price-to-earnings basis, excluding commodities, the U.K. trades at a 10% discount to global markets, a level it hasn't seen in nearly 10 years.

Emerging markets and commodities exposure is high



Source - RBC Wealth Management, National research correspondent

The fate of U.K. equities is also linked to emerging markets and commodities.

Such cheapness is warranted, in our view, given the risks enumerated above. The consensus earnings growth expectation of less than 6% for 2018 is comparatively uncompelling. With the number of profit warnings at a six-year high in Q3 2017, earnings expectations may well be reined in further.

Moreover, as a high dividend-paying market, yielding 4% overall, the U.K. has tended to underperform when monetary policy is tightened. U.K. equities are also still largely exposed to commodities and emerging markets, which are both highly sensitive to the U.S. dollar. Should the dollar rally, as RBC Capital Markets expects, it could also contribute to restraining U.K. equity performance.

Some argue that, should the pound weaken markedly due to a breakdown in negotiations, U.K. equities could rally, much like they did after the referendum results. We concede that a cheap pound could eventually attract buyers, but worry a breakdown in talks could also be interpreted as the worst scenario materialising, in which case, the inverse relationship of the pound falling but equities gaining may well dissipate. The outlook is finely balanced.

We expect volatility to increase and for better entry points for equity, fixed income, and foreign exchange investors to materialise in the months ahead.

We remain selective, preferring high-quality businesses with sound balance sheets, robust cash flow generation, and a track record of compounding returns to shareholders. We maintain our bias towards international exposure, focusing on companies exposed to either a strongly growing Europe or to U.S. tax reform, or both. We would steer clear of companies in the potential crosshairs of nationalisation (utilities, transport) and believe that despite their underperformance, it is still too early to step back into domestic stocks.

With the U.K. outlook mired in uncertainty, we expect volatility to increase and for better entry points for equity, fixed income, and foreign exchange investors to materialise in the months ahead.

Synchronicity

2018 looks to be a year of sustained expansion in every major economy. Synchronised global growth, largely absent over the past seven years, emerged last year. Canada had back-to-back quarters of 3%–4% GDP growth midyear. U.S. growth topped the elusive 3% mark in Q2 and Q3, despite two mammoth hurricanes. The fourth quarter looks to have been as strong.

Europe has also picked up the pace. After flirting with yet another recession two-and-a-half years ago, the eurozone economy managed to develop some upward momentum, finishing 2016 up by a much better-than-expected 1.7%, improving further to 2.3% (est.) in the year just ended. It should do as well in 2018, as economic activity indexes point to a strong start. The improvement has been broad-based: most economies are participating. Germany is no longer carrying the load alone.

Meanwhile, Japan, the world's third-largest economy, has completed seven consecutive quarters of positive GDP growth—the first such streak in almost 17 years.

China's growth has become more balanced—debt is at last growing no faster than the economy. And important emerging economies like Brazil's and Russia's are rebounding out of deep downturns while India's growth has reaccelerated back above the 6% mark.

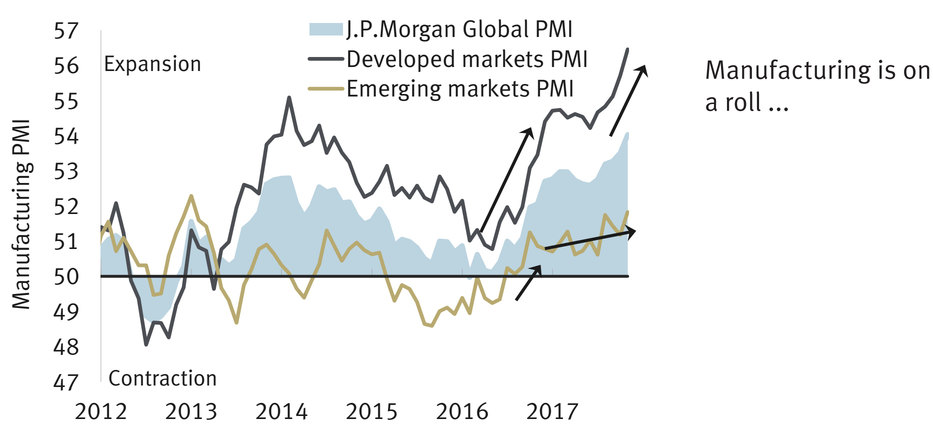
For most economies, today's improved GDP growth rates are still below those posted in the heady years leading up to the financial crisis, helping to keep inflation at bay. Central banks in North

Equity views

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

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

Global manufacturing expansion continues



Note: PMI refers to Purchasing Managers' Index for manufacturing sector, a measure for economic activity
Source - Haver Analytics, RBC Global Asset Management

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

Kelly Bogdanov
San Francisco, United States
kelly.bogdanov@rbc.com

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

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

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

Global equity

America and Europe are very gradually moving away from the extraordinarily accommodative policies of the past eight years.

From the global equity investors' perspective, here's how the table is set:

- Global economies are expanding in a synchronised fashion for the first time in seven years. The pace of that expansion has recently picked up.
- Most central banks remain extremely accommodative even as they move toward very gradually "normalising" policy. Credit conditions restrictive enough to produce a global downturn or, in particular, a U.S. recession, are nowhere in sight.
- Earnings, after several years of decline/stagnation, turned higher a year-and-a-half ago and are now near or above all-time highs. Managements' guidance, even those made long before U.S. tax cuts looked plausible, have been very upbeat, correctly signaling the strong growth delivered in 2017 with another good gain expected this year.

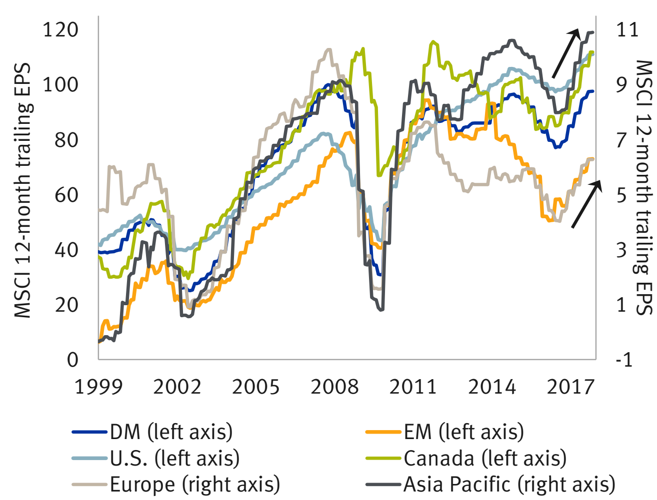
Looking at the U.S. equity market, the S&P 500 began 2017 at 19.1x trailing 12-month earnings and finished the year at 20.4x. As 2018 got underway, earnings were forecast to grow by 7% before tax cuts and by at least 12% when those cuts are factored in. That puts the index somewhere between 18x and 19x those forecasts.

By comparison, Canada's TSX is trading at 16.6x 2018's expected earnings while European stocks are at 15.0x. We don't find today's P/Es an impediment to equity markets delivering worthwhile gains this year, particularly if earnings grow as forecast.

The path to those gains is unlikely to be smooth. It's not difficult to imagine developments that could produce bouts of volatility. NAFTA is front of mind in Canada. Politics and Brexit preoccupy Europeans. Midterm elections are on the way in the U.S. along with a clearer elaboration of the administration's trade policy imperatives—likely to be worrying to many outside the U.S.

Our indicators suggest no recession is in sight. We are inclined to go on giving equities the benefit of the doubt through 2018 and probably beyond.

Global corporate profits rising



... as are earnings.

Note: Earnings per share (EPS) in U.S. dollars for developed markets (DM), emerging markets (EM), U.S., and Asia Pacific; euros for Europe; Canadian dollars for Canada
Source - MSCI, Bloomberg, RBC Global Asset Management

Regional highlights

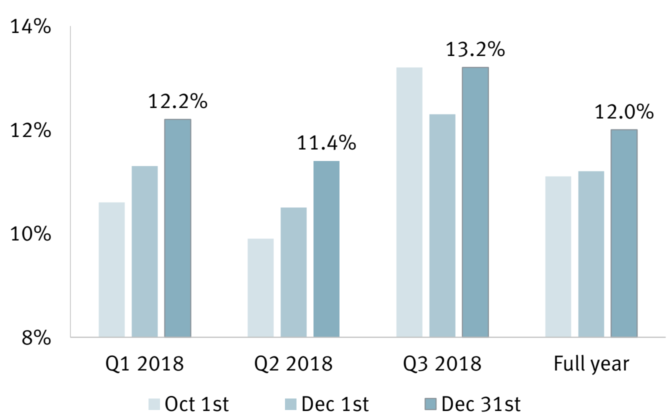
United States

- We remain constructive on the U.S. equity market for 2018 given our positive outlook for the domestic and global economies, and benefits from the tax cut package, combined with low recession risks.
- The U.S. is in the midst of its third-longest economic expansion since WWII, a cycle which is within reach of becoming the longest on record. While cumulative GDP growth has significantly lagged other periods, its trajectory seems to be picking up as the economy builds on recent momentum and is boosted by tax cuts and ongoing deregulatory efforts.
- U.S. equity returns should be driven by rising profitability and some modest multiple expansion. This year, underlying economic strength and tax cuts should push the earnings growth rate above the 12% level achieved in 2017. We anticipate increased stock buybacks and dividend hikes, along with stronger merger and acquisition activity—all of which can benefit shareholders.
- We'd be surprised, however, if there weren't at least a pullback in 2018, if not a 10% or more correction. The market has traveled a long way for a long time without one. So while we believe U.S. stocks are well positioned to deliver attractive gains over the course of the year, investors should expect some bumps along the way.

Canada

- We are Market Weight Canadian equities, reflecting our outlook for key market segments. Banks are fairly valued given expectations for slowing mortgage originations, supportive credit trends, and modest earnings growth. Our outlook for the energy complex is muted in light of expectations for robust U.S. supply growth.
- RBC Capital Markets revised its forecast for North American benchmark crude oil prices to $54 per barrel in 2018 (from $51) and $56 in 2019 (from $54) though it expects crude oil prices to remain range-bound as U.S. output growth swells in 2018.
- The S&P/TSX significantly underperformed global equity benchmarks in 2017 including the S&P 500. As a result, the valuation discount of the S&P/TSX relative to

2018 earnings growth estimates over time



The synchronized global expansion and low recessionary risks, U.S. tax reform, and consumer activity contributed to double-digit and rising earnings expectations heading into 2018.

Source - RBC Wealth Management, Thomson Reuters I/B/E/S; data through 12/31/17 the S&P 500 has widened further. This valuation discount reflects a number of uncertainties and potential risks that we continue to monitor: any adverse change to NAFTA, the impact of higher borrowing costs on domestic consumers, and the uncertain trajectory of energy prices.

- Factors that could prompt a more positive stance on Canadian equities are greater comfort around the medium-term outlook for crude oil and greater visibility on a satisfactory resolution to NAFTA renegotiations.

Continental Europe & U.K.

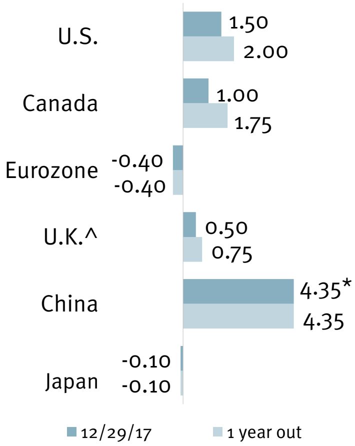
- European equities markets were up 9% in 2017 in local currency terms, though USD investors would have enjoyed much larger gains (+24%) enhanced by the strength of the currency. We expect 2018 will be another constructive year and continue to recommend an Overweight stance in the region.
- The recent recovery is pleasingly broad-based, with all countries now enjoying growth. It is being led by stronger domestic demand, and with economic and political uncertainty waning, there are now signs business investment, up until now elusive, is also making a comeback. This bodes well for the sustainability of the recovery.
- Valuations are not much above their long-term average, on 15x forward P/E multiples, and thus still leave room for upside, in our view. Moreover, compared to the U.S., the region remains very attractively priced. With RBC Capital Markets expecting the currency to go mostly sideways in 2018, we would recommend any European equity exposure to be unhedged.
- Given the cyclical recovery, we like companies exposed to the domestic economy, including well-capitalised banks. With long yields poised to move gradually higher, banks should be well supported. Moreover, the region has tended to do well when long yields rise. Small caps also offer opportunities on a selective basis.

Asia

- After an outsized performance in many Asian equity markets in 2017, we expect more modest returns in 2018. The MSCI AC Asia Pacific Index rose by 26.7% (January 1 through December 20), with particular strength in the Hang Seng Index, up 32%.
- We believe the probability of a pullback or correction is elevated, and the key risk factor is an end to the steady Chinese economic data. We expect the Chinese property market to soften moderately in 2018 and believe that financial deleveraging will form a headwind, although to what extent is difficult to judge. We also think mainland Chinese stocks are overvalued. Meanwhile, a number of large-cap stocks in Hong Kong are close to fully valued, although opportunities in new economy stocks still exist.
- The Japanese equity market has reached levels not seen in over 25 years. The earnings outlook and valuations are still somewhat supportive of equities. But the chance of consolidation or a pullback in equities is moving higher after a very impressive performance over the past 18 months. All else equal, a pullback would be a buying opportunity. Inflation is modestly positive—arguably the key achievement of Abenomics. Key risks include currency appreciation and weakening global economic indicators.

A few of our favorite things

Central bank rate (%)



^under review
*1-yr base lending rate for working capital, PBoC
Source - RBC Investment Strategy Committee, RBC Capital Markets, Global Portfolio Advisory Committee, Consensus Economics

Craig Bishop
Minneapolis, United States
craig.bishop@rbc.com

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

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

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

"Green shoots" became a popular phrase in the wake of the Great Recession, denoting cautious optimism about the outlook for an economy. So often, however, the green shoots went dormant and the predicted growth failed to materialize, keeping interest rates unusually low. But as we enter 2018, major global economies appear to finally be in sync and for next year a few of our favorite things investors should pay attention to include growth (GDP), inflation, and yield curves.

Across most major geographies, moderate growth and tame inflation is a developing theme although each economy is at a different stage in the cycle. In its ninth year, the U.S. economic expansion is clearly more mature and should benefit in the short run from tax reform. As the chart on the next page indicates, economic expansions in Canada and Europe can't yet boast of a comparable growth trend and the U.K. will remain weighed down by Brexit, but the signs overall point to continued growth through 2018 and perhaps beyond.

Central bank policy has and will continue to be essential to continued expansion. Even though the Fed is leading others toward reduced accommodation and policy normalization, the process will be very gradual, especially as inflation in most instances (except the U.K.) remains below the common 2% target.

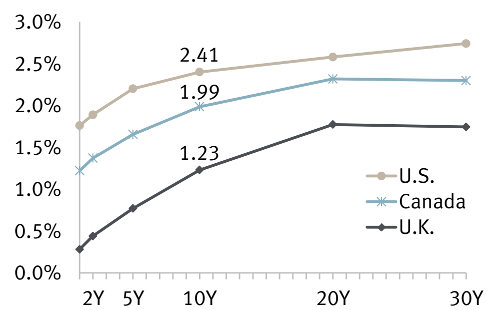
The bane for central banks could very well be further yield curve flattening. With many sovereign curves at their flattest levels in years (and likely to remain so), our view is central bankers will not willingly invert their

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

respective yield curves via reduced accommodation. For the Fed, to us, this could mean just two rate hikes in 2018 versus the three penciled in by the Federal Open Market Committee and currently expected by the market.

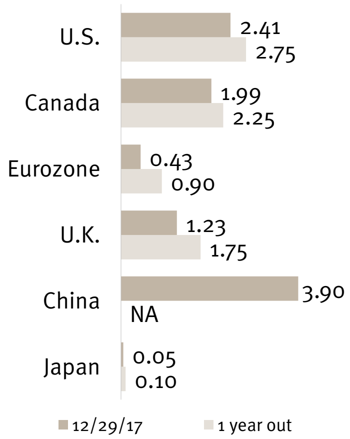
Regional highlights

United States

- Tax reform provided a year-end boost to 10Y U.S. Treasury yields, which closed out 2017 at 2.41%, up just 4 basis points for the year. But expectations the Fed could be quick to follow with further rate hikes kept pressure on short-term rates, further flattening the yield curve. We expect the shape of the curve to continue

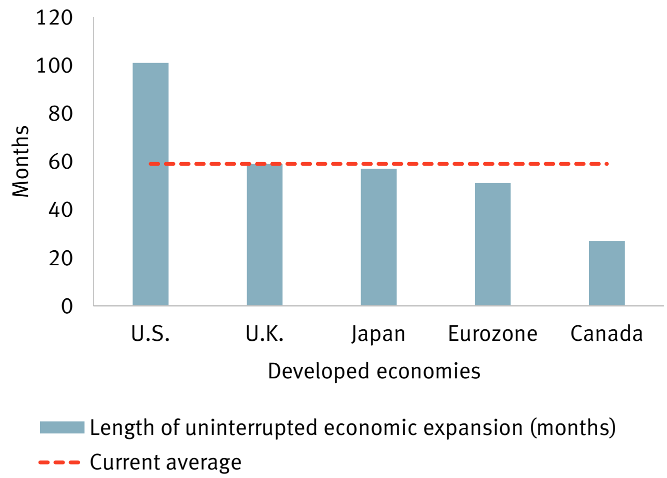
Global fixed income

10-year rate (%)



Note: Eurozone utilizes German Bunds
Source - RBC Investment Strategy Committee, RBC Capital Markets, Global Portfolio Advisory Committee

Not all expansions are created equal



Source - RBC Wealth Management, Bloomberg; data through 9/30/17

The U.S. expansion is in its ninth year, while others have more room to run.

to be a major market theme in 2018, and see a flat yield curve increasingly challenging the Fed's plans for three rate hikes this year.

- We still see the 10Y holding below 2.75% in 2018 as that is the Fed's December 2017 estimate for the terminal fed funds rate. Our research indicates that during the past two tightening cycles, the 10Y has peaked in line with the terminal rate.

- Tax reform may be a mixed bag for speculative-grade credit markets, as the package includes a provision that limits the amount of interest payments firms can deduct, which could stress highly indebted companies. Ultimately, firms may be reluctant to increase debt loads, which may be a credit positive for investors.

- We expect municipal bond issuance to decline in Q1 2018 as tax reform eliminated one muni structure—Advanced Refundings. Individual tax rates were lowered only modestly and with competitive yields and high quality, we see continued strong demand and reduced issuance as supportive factors for muni prices.

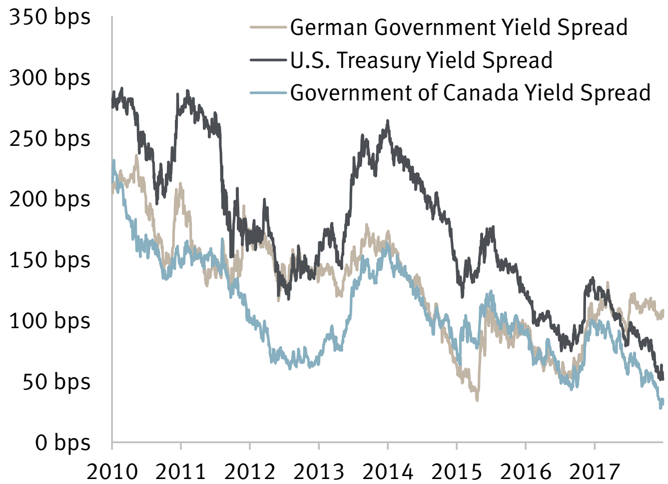
Canada

- The Government of Canada yield curve has reached its flattest level since 2008. A move lower in longer-dated yields, now below their six-month averages, is the reason for the current shape and reflects both a more modest growth outlook and a lack of inflationary pressure. The shape of the curve, combined with the lower absolute level of longer-dated yields, reduces the appeal of extension trades and keeps our attention on short-to-intermediate maturity bonds.

- Credit spreads in Canada are at three-year lows despite record high levels of supply. Investor demand remains robust for corporate bonds thanks to the low yields on alternative assets as well as the healthy economic backdrop. We continue to recommend a selective approach when moving down the capital structure as well as diversification by geographic exposure.

- Preferred shares have underperformed into year end as the market is digesting a recent pickup of issuance. We remain constructive on the prospects for preferred shares due

North American yield curves at flattest levels of the current recovery



Source - RBC Wealth Management, Bloomberg; data through 12/29/17

A lack of inflationary pressures continues to keep longer-term yields low, flattening global yield curves.

to interest rate forecasts, demand and supply imbalances, and attractive valuations. Our strategy remains diversified across share structure and issuers.

Continental Europe & U.K.

- The eurozone growth backdrop continues to improve. Nevertheless, inflation should remain stubbornly low, given the region is behind the U.S. in its credit cycle and excess capacity is relatively high. This, and a central bank that does not plan to increase rates whilst it continues to buy bonds, means we don't expect rate hikes in 2018.
- These low rates will anchor bond yields and although potential volatility in U.S. bond markets could impact German Bunds, we believe weakness should be transitory given the ECB's dovish stance.
- The strength of the eurozone economy will also be supportive for corporate bonds, and we expect cyclical industries to be a chief beneficiary.
- In November, the BoE hiked the Bank Rate for the first time since 2007, and although this was enacted in response to high inflation, we don't expect further increases given Brexit-related headwinds to the economy. The volatility of the Gilt market in the first weeks of December has served to highlight how vulnerable Gilts are to headline risks that emanate as Brexit negotiations proceed. Despite a recent breakthrough in talks, we expect this volatility to continue as the EU is taking a tough opening position on transition and the future economic relationship with the U.K.
- The prospect for a Labour Party-led government preoccupies us as we consider risks to U.K. assets are underpriced given the potential for looser fiscal policy and a more hawkish monetary policy. This combination would drive Gilt yields higher.
- We prefer credit over Gilts, and are relatively comfortable with interest rate risk.

All that glitters in 2018 … is not gold

Commodity forecasts

	2018E	2019E
Oil (WTI $/bbl)	54.00	56.00
Natural Gas ($/mmBtu)	3.00	3.00
Gold ($/oz)	1,303	NA
Copper ($/lb)	3.00	3.25
Corn ($/bu)	3.78	3.90
Wheat ($/bu)	4.54	4.70

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

Gold prices had a strong 2017, despite some brief periods of weakness. Even with the recent Fed rate hike, weaker-than-normal physical demand in India, and a continued rally in equities, gold ended the year up roughly 13%. Most of the strength can be attributed to weakness in the USD and sporadic geopolitical headlines. However, looking at 2018, we expect a number of headwinds to weigh on gold prices for the year to come.

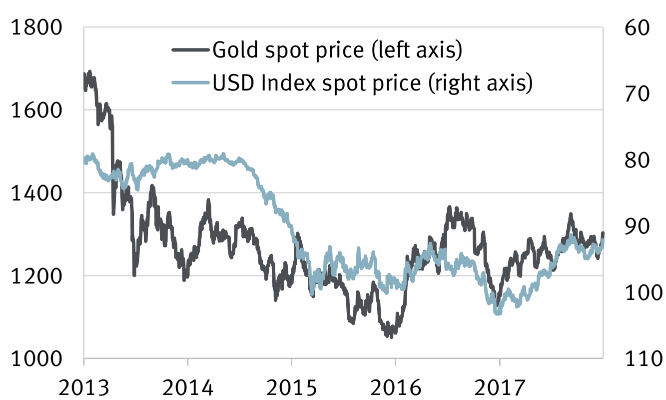
Most importantly is the macroeconomic environment. The International Monetary Fund forecasts moderate, sustained economic growth across most regions of the globe, but still expects inflation to be weak, indicating slack in many economies has yet to be eliminated. In this type of environment, equities tend to rally, and the need to hold gold as a store of value decreases. And with a few rate hikes expected in 2018, the USD may be set to strengthen. Since gold is denominated in U.S. dollars, it tends to move inversely to the greenback.

The supply profile of gold looks stable, and RBC Capital Markets forecasts slightly lower mine supply, but higher scrap supply and little change in net producer hedging. However, demand could strengthen, with RBC Capital Markets predicting higher volumes from both jewelry and bar and coin demand, suggesting there could be modest upside to bullion prices.

The sudden rise of Bitcoin this year has led some to question whether digital currencies are attracting investors away from gold. While some commodity experts believe there may be some merit to that idea, it is unlikely Bitcoin or any digital currency could replace gold in the foreseeable future given the latter's unrivaled reputation as a store of value for traditional long-term investors.

RBC Capital Markets forecasts the 2018 average gold price at $1,303/oz, the exact price at the end of 2017. But while returns are expected to be flat, RBC Capital Markets believes the risks are skewed to the upside given the always-present potential for renewed geopolitical upheaval.

Gold spot price vs. USD Index spot price



Strength in the USD could put pressure on bullion prices.

Source - RBC Wealth Management, Bloomberg; data through 12/29/17

Alicia Buckiewicz
Toronto, Canada
alicia.buckiewicz@rbc.com

Currency forecasts

Currency pair	Current rate	Forecast Dec 2018	Change*
Major currencies			
USD Index	92.12	97.22	6%
CAD/USD	0.79	0.79	0%
USD/CAD	1.25	1.27	2%
EUR/USD	1.20	1.14	-5%
GBP/USD	1.35	1.23	-9%
USD/CHF	0.97	1.11	14%
USD/JPY	112.69	120.00	6%
AUD/USD	0.78	0.73	-6%
NZD/USD	0.70	0.69	-1%
EUR/JPY	135.28	137.00	1%
EUR/GBP	0.88	0.93	6%
EUR/CHF	1.17	1.26	8%
Emerging currencies			
USD/CNY	6.50	7.30	12%
USD/INR	63.87	65.20	2%
USD/SGD	1.33	1.47	11%

* 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: Ready for a comeback?

The dollar appears poised to recover after broadly underperforming throughout 2017. Firm economic growth and a tight labour market argue for further normalising/tightening of monetary policy, something the market continues to be cautious about. While a possible flare-up of political uncertainty and lack of inflationary pressures could derail the Fed from its projected path of rate hikes and knock the dollar off course, we expect these risks to be contained, leaving room for dollar strength.

Euro: Robust growth, but rates steady

The European Central Bank will likely remain very cautious regarding rate hikes for at least the next 18 months as slack in the labour market is expected to keep inflationary pressures subdued. We expect interest rate rises will only emerge well past the end of the quantitative easing programme, currently scheduled for September. The market is more aggressive, factoring in earlier rate increases than we foresee. The likely readjustment of these expectations underpins our neutral outlook for the currency.

British pound: Resiliency at risk

Recent progress on Brexit negotiations only clears the first hurdle in what is expected to be a challenging and lengthy process. The EU and U.K. have agreed to move to the next phase of talks—discussion of transition and the future trading relationship. We still believe the pound will head lower over time against a confluence of inflation dynamics, an attendant pause in rate hikes by the Bank of England, and domestic economic and political challenges.

Canadian dollar: On pause, for now

A dovish tone continues to emanate from the Bank of Canada as a wait-and-see approach to how the economy adjusts to earlier rate hikes prevails. Elevated household debt, subdued inflation, and uncertainty surrounding NAFTA renegotiations should keep the current policy stimulus in place until mid-2018. But we think the need for additional rate hikes will become more evident through 2018. Any convergence with U.S. monetary policy will provide scope for renewed CAD strength.

Japanese yen: Standing still

Expansionary policies of the government and, implicitly, the Bank of Japan should remain in place through 2018 against a subdued inflationary backdrop. In a world gradually moving towards normalising monetary policy, the yen runs the risk of standing still as other central banks start to tighten.

Dollar appears poised to recover in 2018

Dollar could shift into higher gear after underperforming in 2017.

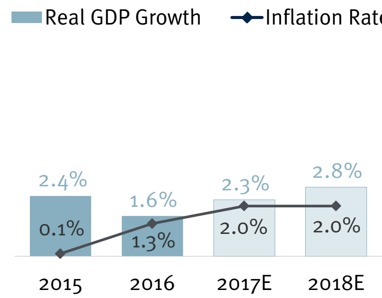
Source - RBC Wealth Management, Bloomberg; data through 1/3/18

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

Key forecasts

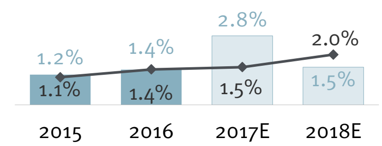
United States — All systems go

- Data returned to normal following two hurricane-skewed months. Small business optimism highest in 34 years on tax cuts. Consumer confidence mixed. Fed hiked rates in December for 3rd time in 2017. Balance sheet unwinding set to increase this month. Q3 GDP revised to 3.2%, 2nd consecutive quarter at +3% growth. Home sales strengthened despite low supply.



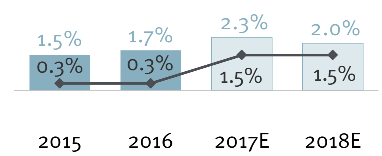
Canada — Energy-led inflation

- Bank of Canada remains data-dependent. Headline inflation accelerated to 2.1% y/y, from 1.4% one month prior; however, the increase is due to energy price rises. Retail sales rebounded 1.5% over the month after three consecutive weak months. Housing data remains mixed. GDP growth stalled to flat m/m. Pace of hiring impressive, unemployment rate fell below 6% for first time since ’08.



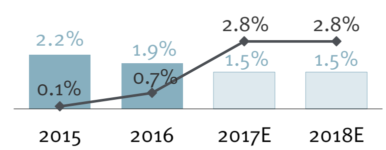
Eurozone — A hawkish ECB?

- European Central Bank spurred a global bond selloff with hawkish comments. Bank now looking to use interest rates to adjust monetary policy, not the current asset purchase program. Eurozone Q3 GDP firmed to 2.6% y/y. Retail sales stumbled to 0.4% y/y, from 1.6% y/y prior. PMIs continue to point to ongoing economic expansion ahead.



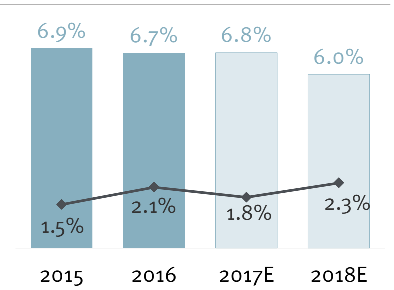
United Kingdom — BoE to remain patient

- Core inflation paused at 2.7% y/y, after post-Brexit acceleration, but remains well above target. Q3 GDP accelerated to 1.7% y/y. Bank of England holds policy rate and asset purchase target. Economist expectations are for next rate hike as a 2019 event.



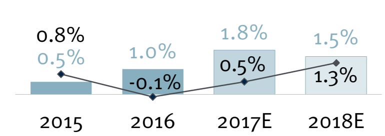
China — Slow and steady

- Retail sales remain robust at 10.2% y/y. Import growth outpaced export growth; however, the trade balance stands at $40B in net exports that are expected to increase as major trading partners’ PMIs at highest levels since 2010. Inflation remains controlled at 1.7% y/y and manufacturing activity robust at 6.6% y/y growth in industrial production.



Japan — Picking up

- Q3 GDP slowed to 0.6% q/q from 0.7% q/q in Q2. Jobless rate fell to lowest level since 1993 as demand for full-time labor outpaced supply. Household spending rose more than expected, while inflation sits at 0.9%. Bond market participants will place more attention on inflation next year given rising oil prices. Perhaps the biggest event will be the Bank of Japan discussions on when to exit monetary stimulus.



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

Market scorecard

Index (local currency)	Level	1 month	YTD	12 month
S&P 500	2,673.61	1.0%	19.4%	19.4%
Dow Industrials (DJIA)	24,719.22	1.8%	25.1%	25.1%
NASDAQ	6,903.39	0.4%	28.2%	28.2%
Russell 2000	1,535.51	-0.6%	13.1%	13.1%
S&P/TSX Comp	16,209.13	0.9%	6.0%	6.0%
FTSE All-Share	4,221.82	4.7%	9.0%	9.0%
STOXX Europe 600	389.18	0.6%	7.7%	7.7%
EURO STOXX 50	3,503.96	-1.8%	6.5%	6.5%
Hang Seng	29,919.15	2.5%	36.0%	36.0%
Shanghai Comp	3,307.17	-0.3%	6.6%	6.6%
Nikkei 225	22,764.94	0.2%	19.1%	19.1%
India Sensex	34,056.83	2.7%	27.9%	27.9%
Singapore Straits Times	3,402.92	-0.9%	18.1%	18.1%
Brazil Ibovespa	76,402.08	6.2%	26.9%	26.9%
Mexican Bolsa IPC	49,354.42	4.8%	8.1%	8.1%
Bond yields	**12/29/17**	**11/30/17**	**12/30/16**	**12 mo. chg**
US 2-Yr Tsy	1.883%	1.782%	1.188%	0.69%
US 10-Yr Tsy	2.405%	2.410%	2.444%	-0.04%
Canada 2-Yr	1.689%	1.432%	0.747%	0.94%
Canada 10-Yr	2.045%	1.889%	1.721%	0.32%
UK 2-Yr	0.438%	0.521%	0.084%	0.35%
UK 10-Yr	1.190%	1.330%	1.239%	-0.05%
Germany 2-Yr	-0.627%	-0.684%	-0.766%	0.14%
Germany 10-Yr	0.427%	0.367%	0.208%	0.22%
Commodities (USD)	**Price**	**1 month**	**YTD**	**12 month**
Gold (spot $/oz)	1,303.05	2.2%	13.1%	13.1%
Silver (spot $/oz)	16.94	3.1%	6.4%	6.4%
Copper ($/metric ton)	7,207.00	7.0%	30.5%	30.5%
Uranium ($/lb)	23.88	18.2%	17.2%	17.2%
Oil (WTI spot/bbl)	60.42	5.3%	12.5%	12.5%
Oil (Brent spot/bbl)	66.87	5.2%	17.7%	17.7%
Natural Gas ($/mmBtu)	2.95	-2.4%	-20.7%	-20.7%
Agriculture Index	282.14	-0.6%	-3.0%	-3.0%
Currencies	**Rate**	**1 month**	**YTD**	**12 month**
US Dollar Index	92.1240	-1.0%	-9.9%	-9.9%
CAD/USD	0.7955	2.6%	6.9%	6.9%
USD/CAD	1.2571	-2.5%	-6.5%	-6.5%
EUR/USD	1.2005	0.8%	14.1%	14.1%
GBP/USD	1.3513	-0.1%	9.5%	9.5%
AUD/USD	0.7809	3.2%	8.3%	8.3%
USD/JPY	112.6900	0.1%	-3.7%	-3.7%
EUR/JPY	135.2800	1.0%	10.0%	10.0%
EUR/GBP	0.8881	0.9%	4.1%	4.1%
EUR/CHF	1.1703	0.0%	9.2%	9.2%
USD/SGD	1.3360	-0.9%	-7.7%	-7.7%
USD/CNY	6.5067	-1.5%	-6.3%	-6.3%
USD/MXN	19.6590	5.5%	-5.2%	-5.2%
USD/BRL	3.3085	1.2%	1.8%	1.8%

The tech heavy NASDAQ was the best performing U.S. index, led by strong gains in the FAANG stocks.

2-year Treasury yields highest in almost a decade following three Fed rate hikes in 2017.

Copper was 2017's best performing commodity on expectations of accelerating global growth.

Euro rallies to levels not seen in three years; however, the 1.21 level can be viewed as technical resistance.

Equity returns do not include dividends, except for the German DAX and 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 0.79 means 1 Canadian dollar will buy 0.79 U.S. dollar. CAD/USD 6.9% return means the Canadian dollar has risen 6.9% vs. the U.S. dollar during the past 12 months. USD/JPY 112.69 means 1 U.S. dollar will buy 112.69 yen. USD/JPY -3.7% return means the U.S. dollar has fallen 3.7% vs. the yen during the past 12 months.

Source - RBC Wealth Management, RBC Capital Markets, Bloomberg; data through 12/29/17.

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 Bogdanov – Co-chair; Portfolio Analyst, RBC Wealth Management Portfolio Advisory Group – Equities, 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 U.S. Equities, RBC Wealth Management Portfolio Advisory Group, 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 – Head of Investment Solutions & Products, RBC Wealth Management Hong Kong, RBC Dominion Securities Inc.

Alan Robinson – Portfolio Analyst, RBC Wealth Management Portfolio Advisory Group – 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:

Alicia Buckiewicz, CFA – 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, Alicia Buckiewicz, Christopher Girdler, Patrick McAllister, and Jay Roberts, employees of RBC Wealth Management USA's foreign affiliate RBC Dominion Securities Inc.; and 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; 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 http://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 Portfolio: 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 (TP)/Outperform (O), Sector Perform (SP) and Underperform (U) most closely correspond to Buy, Hold/Neutral and Sell, respectively, the meanings are not the same because our ratings are determined on a relative basis (as described below).

Distribution of Ratings - RBC Capital Markets, LLC Equity Research
As of December 31, 2017

			Investment Banking Services Provided During Past 12 Months	
Rating	Count	Percent	Count	Percent
Buy [Top Pick & Outperform]	868	52.42	281	32.37
Hold [Sector Perform]	683	41.24	155	22.69
Sell [Underperform]	105	6.34	8	7.62

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. Although RBC Capital Markets, LLC ratings of Top Pick (TP)/Outperform (O), Sector Perform (SP), and Underperform (U) most closely correspond to Buy, Hold/Neutral and Sell, respectively, the meanings are not the same because our ratings are determined on a relative basis (as described below).

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.

Risk Rating: As of March 31, 2013, RBC Capital Markets, LLC suspends its Average and Above Average risk ratings. 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 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 Web site at http://www.rbccm.com/GLDisclosure/PublicWeb/DisclosureLookup.aspx?EntityID=2. Conflicts of interests related to our investment advisory business can be found in Part II of the Firm's Form ADV or the Investment Advisor Group 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 II of the ADV, or 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.

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.

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 perfo rmance 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