

Global Insight

Perspectives from the Global Portfolio Advisory Committee

Will political turbulence roil equities?

We look at the potential implications of impeachment for equities, based on past market performance and the views of institutional investors.

Kelly Bogdanova | Page 4



Global equity
A study in opposites



Global fixed income
A change of 'Lagarde' at the ECB



Currencies
U.S. dollar: Flight from safety



Commodities
Wheat – No pain, no grains

For important and required non-U.S. analyst disclosures, see page 21.

Disseminated: Nov 4, 2019 8:00ET; Produced: Nov 1, 2019 15:07ET

Investment and insurance products offered through RBC Wealth Management are not insured by the FDIC or any other federal government agency, are not deposits or other obligations of, or guaranteed by, a bank or any bank affiliate, and are subject to investment risks, including possible loss of the principal amount invested.



Wealth Management

Table of contents

4 Will political turbulence roil equities?

As Washington grapples with the possible impeachment of President Trump, we look at the potential implications for equity investments. Market performance during past presidential scandals, and the views of institutional investors, suggest economic fundamentals will likely outweigh political drama.

9 Global equity: A study in opposites

The dichotomy between business angst and confident consumers is more or less the state of affairs across the developed world. While we're tuned in to the warning signs of when a U.S. recession may arrive, that looks to us to be some ways off. Stocks can move higher from here, and we expect they will.

13 Global fixed income: A change of 'Lagarde' at the ECB

Christine Lagarde has stepped into the top job at the ECB, and successfully bridging the chasm between monetary and fiscal policy will be her immediate challenge. Initially, we expect a continuation of her predecessor's policies, but it's probably safe to say Lagarde wasn't hired to maintain the status quo.

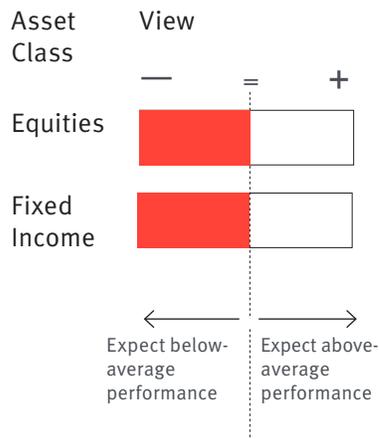
Inside the markets

- 3 RBC's investment stance
- 9 Global equity
- 13 Global fixed income
- 16 Currencies
- 17 Commodities
- 18 Key Forecasts
- 19 Market scorecard

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

RBC's investment stance

Global asset views



See “Views explanation” below for details

Source - RBC Wealth Management

Equities

- We continue to anticipate more upside for the U.S. and global equity markets and would maintain Market Weight (benchmark) exposure. Some trade and tariff risks have receded and economic indicators have begun to stabilize, albeit at sub-par levels. Earnings estimates for the balance of this year are “good enough,” and modest profit growth next year should provide a foundation for a higher equity prices.
- But this is not the time to step on the gas. We would use market strength that materializes in coming quarters to pare back inappropriate overweights and de-emphasize those sectors and industries that require robust GDP growth to thrive. Even though our recession indicators are not yet flashing red, we would nevertheless start to prepare portfolios for when times may be more challenging.

Fixed income

- 2019 began with the Fed signaling three rate hikes; it just cut rates for the third time. Indications are those three could be it with trade and Brexit concerns lessening. But as long as the Fed maintains its commitment to prolonging the economic expansion, we think it’s too early to say we’ve seen the last rate cut for this cycle. The 10-year Treasury yield has settled into a 1.50%–2.00% trading range, which is likely to persist for the near future, but we see a test of lower levels in the months ahead on continued economic growth concerns.
- We maintain our Market Weight in global fixed income. Investors remain best served by a continued focus on quality. And with the likelihood of lower rates, reinvestment risk should remain a concern.

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.



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

Will political turbulence roil equities?

As Washington grapples with the possible impeachment of President Trump, we look at the potential implications for equity investments. Market performance during past presidential scandals, and the views of institutional investors, suggest economic fundamentals will likely outweigh political drama.

Impeachment in the House of Representatives, and a trial thereafter in the Senate, if they transpire, will be important, highly scrutinized events. This process can be very divisive, as was the case with President Bill Clinton's impeachment. Or, in more extreme circumstances, it can leave an indelible imprint on the country, as when the Watergate scandal brought down President Richard Nixon.

But if history is a guide, the possible impeachment and trial of President Donald Trump are unlikely to have a lasting impact on the U.S. stock market. The Clinton saga barely nudged the market, while the more intense and drawn-out Nixon episode pressured the market for only a season. Both periods were marked by events outside of the Capitol that created stiffer headwinds for stocks.

We would not incorporate the impeachment process into asset allocation decisions unless it starts to weigh meaningfully on the U.S. economy and corporate profits—and we see no signs of this so far.

Economic growth has slowed, but remains sufficient for companies to increase profits moderately and for stocks to advance, in our view. These are the factors that drive the market over the long term, not Washington turmoil.

The political conflicts currently playing out in Washington do not figure prominently in the concerns of institutional investors, according to a recent RBC Capital Markets survey of institutional clients. A majority of respondents viewed a scenario in which Trump was impeached by the House and subsequently acquitted in a Senate trial as market-neutral. And of the top five items on respondents' worry lists, only one—the possibility of a Democratic sweep of both houses of Congress and the presidency—was directly related to the 2020 election.

Political calculus, market math

Presidential impeachment and trial are largely political processes, but they also have legal dimensions. Previously they've included a significant amount of rancorous rhetoric as well as political and legal wrangling, which captured media and public attention.

This go-around, the developments will be magnified by a torrent of internet media coverage and social media discourse. And the legal maneuvering could be more intense, given that Trump is very comfortable with—and perhaps even relishes—aggressively litigating.

Impeachment and equities

It seems likely to us that House Democrats will have the votes to impeach the president for the following reasons. They control the chamber, it takes just a simple majority of members, and the “unofficial” vote tally is already pointing in this direction. House Democrats have signaled the impeachment vote(s) could come before year end.

Impeachment equates to bringing formal charges against the president for committing “Treason, Bribery, or other high Crimes and Misdemeanors,” as set forth by the Constitution. The terms “high crimes and misdemeanors” are intentionally broad and give Congress wide latitude, according to legal scholars.

The possibility of Trump being impeached is well known by institutional investors, so we don’t think this would jolt financial markets—that is, unless unforeseen developments change the political and/or legal dynamics between now and then.

Once a president is impeached (formally charged with one or more offenses), the Constitution dictates that the process moves to the Senate where a trial takes place to determine whether the president is guilty of the charge(s). The chief justice of the Supreme Court presides over the trial and the senators serve as the jury.

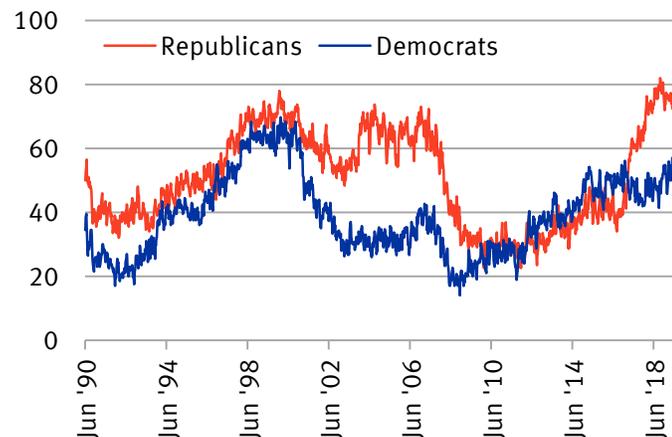
In the Senate the hurdle is higher. A guilty verdict, which removes the president from office, requires a two-thirds supermajority, or 67 of 100 senators. There are 47 Democrats in the Senate, so conviction would take another 20 Republicans to join them, or more if a few “red state” Democrats were to break ranks.

While some Republican Senators have been sharply critical of Trump’s interactions with Ukraine and the activities of his proxies, we doubt many Republicans would line up against him unless new developments change the political and legal landscape.

Various polls show the president’s support among Republican voters remains high. Sentiment about the economy and personal finances—among Trump’s signature issues—are also quite elevated among registered Republicans, according to a Bloomberg survey.

Consumer sentiment by political party affiliation

Bloomberg Consumer Comfort Index



Currently, Republicans’ attitudes toward the economy and personal finances are much more positive than Democrats’ attitudes.

Source - RBC Wealth Management, RBC Capital Markets, Bloomberg; data through 10/31/19

Impeachment and equities

Polls are important in this regard. While Clinton maintained his approval rating throughout his impeachment process, Nixon's public support eroded over the course of the Watergate saga, from a high of 68% down to 24% soon before he resigned, according to Gallup. If Republican voters stick with Trump, we think most Republican Senators will do likewise. But if Trump loses a large share of Republican voters' support throughout the process, anything goes.

RBC Capital Markets' U.S. Equity Strategy team asked its institutional investor clients how the following scenario would impact the equity market: impeachment of Trump in the House, followed by acquittal in the Senate. A majority, 57%, said it would be a market-neutral event, while 30% said it would be bearish and 7% rated it very bearish; the remaining respondents said it would be positive.

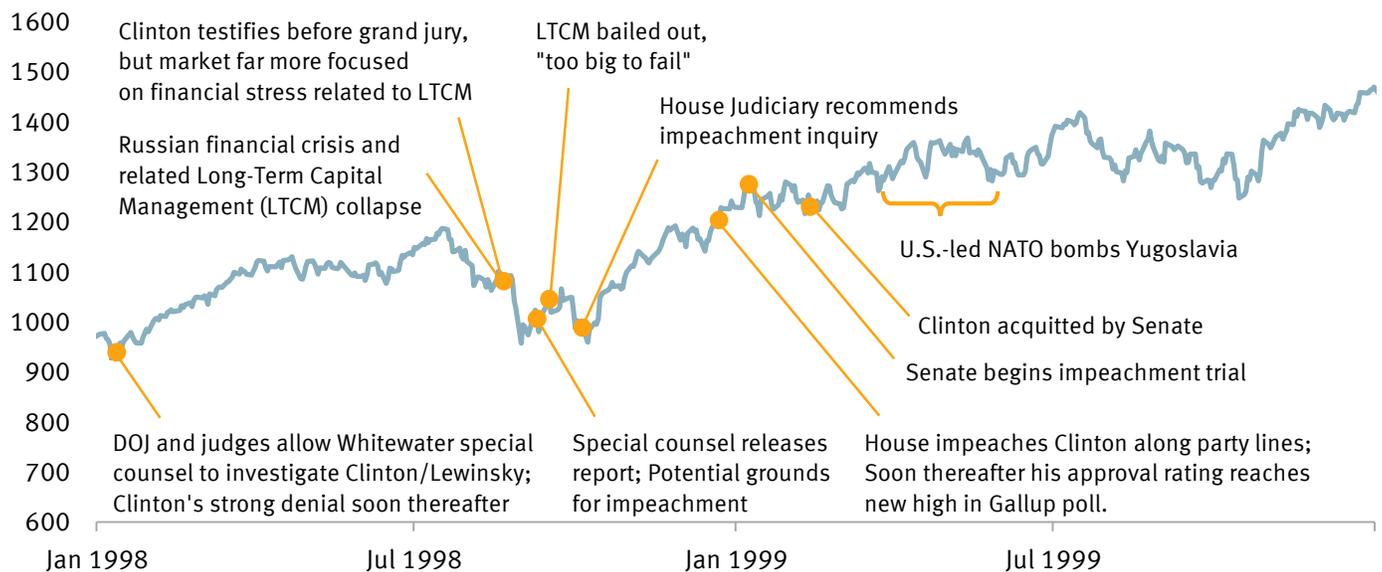
Presidential scandals make headlines, but ...

When it comes to the potential impact on the U.S. economy and stock market, there are only two modern-era comparisons. The Clinton impeachment inquiry left the market relatively unscathed, while the impact of the Nixon Watergate scandal is more difficult to unravel. Importantly, in both cases, other outside factors weighed on the market significantly.

During Clinton's impeachment and trial, which spanned from mid-1998 to early 1999 and ended with acquittal, the U.S. economy boomed. Real GDP growth averaged 5.2% q/q annualized, core inflation was tame, consumer confidence was high, and S&P 500 profits rose modestly. Clinton's approval rating was 63% or higher throughout the process, according to Gallup.

At the time, the market was *much* more negatively impacted by the emerging-market debt/Russian default crises and the related collapse of a large U.S. hedge fund, Long Term Capital Management (LTCM), than it was by the Clinton saga.

S&P 500 during President Bill Clinton's impeachment and trial



Source - RBC Wealth Management, CUNY-Brooklyn College, Wikipedia (LTCM)

Impeachment and equities

At its worst point, the S&P 500 briefly fell 19% in mid-1998. It rallied back to a new high in short order and then continued to advance.

The Watergate scandal in the 1970s, which ultimately engulfed Nixon, included an initial step that is not set forth in the Constitution. First, a special Senate committee investigated the role of the president and White House staff in Watergate. The House impeachment inquiry began later.

Nixon's voluntary resignation in August 1974—almost two years after the Watergate break-in—preempted a House impeachment vote (and trial).

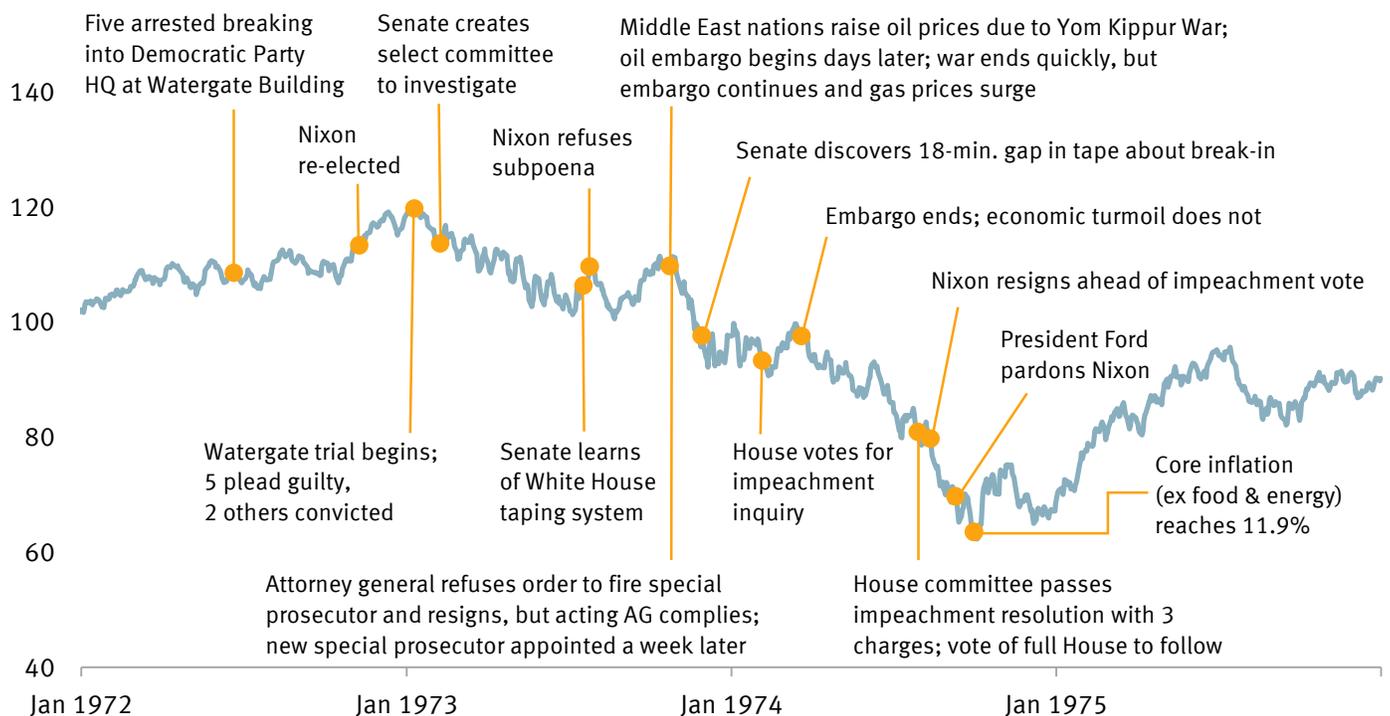
Watergate developments triggered periodic selloffs in equities and were a headwind for the market until late in the process.

But at the time, the economy and stock market were roiled much more by an unrelated crisis. The Arab oil embargo began right as the Senate Watergate investigation was heating up.

The embargo inflicted pain on an already-fragile economy and ratcheted up pressure on household finances. Oil prices skyrocketed four-fold, rising from \$3 to nearly \$12 per barrel. Adjusting for inflation, this is equivalent to prices jumping from \$17 to \$68 per barrel in today's dollars. Of course, gasoline prices soared as well.

U.S. inflation gauges had been trending higher when the embargo hit. Inflation increased significantly during the crisis and continued to climb further afterward. Even core inflation (which excludes food and energy) spiked, reaching 11.9% in September 1974, despite the embargo having ended six months earlier.

S&P 500 during President Richard Nixon's Watergate scandal



Source - RBC Wealth Management, CUNY-Brooklyn College, Wikipedia

The moral of these stories from the Nixon and Clinton eras is that developments outside of the impeachment process—the oil embargo in Nixon’s case and the emerging-market debt crisis/Russian default/LTCM bailout in Clinton’s—had much greater impacts on the stock market than did either of the Washington dramas.

The 2020 election: What will we know, and when will we know it?

The big unknown about the possible Trump impeachment and trial is how the process might affect the 2020 election. Whether it would increase the probability of a Democratic Party sweep is an important question for the U.S. equity market, given some S&P 500 sectors could face challenges under this scenario.

According to RBC Capital Markets’ industry analysts, Health Care, Energy, Financials, and large internet firms would be at greatest risk of new regulatory pressures if the Democratic Party wins the White House, House of Representatives, and Senate.

This assessment is largely echoed by RBC Capital Markets’ institutional clients, according to a recent survey.

The election is starting to keep institutional investors up at night. RBC Capital Markets’ survey also identified the five issues that top their worry list, one of which is related to the election while the others have been worries for quite some time: (1) trade war/tariffs, (2) the 2020 elections, a Democratic sweep, an Elizabeth Warren presidential win, (3) Trump and Trump’s tweets, (4) monetary policy and rates, and (5) geopolitical risks and war.

Despite potential sector challenges, RBC Capital Markets’ U.S. Equity Strategy team believes there will be attractive investable themes in a variety of 2020 election scenarios. Once the caucus and primary season begins in February and March 2020, the election landscape and related investment themes will start to take shape.

Fundamentals will remain fundamental

We do not advise changing asset allocations in portfolios based solely on developments in Washington. While the political and legal proceedings could touch off periods of volatility, we think the market will continue to be driven by underlying economic and corporate earnings fundamentals over the mid and long term.

Staying focused on the economic indicators is, in our view, the most effective way of gauging the market’s response. If the impeachment process and possible trial become problematic for the economy by any meaningful degree, it will show up in the data.

As long as the trajectories of the global and domestic economies and corporate earnings remain at least in slow-growth modes—as they are now—we are comfortable holding U.S. and global equities at the Market Weight level in portfolios.

A study in opposites

The global economy has been going through an unusually slow growth phase over the past nine months or so. Much of this, in our view, has been the result of forces stemming from the volatile trade dispute/tariff environment. Policy uncertainty has fostered business uncertainty. The capital spending upswing expected to be unleashed by the massive stimulus injected into the U.S. economy by way of the Tax Cuts and Jobs Act has proven to be disappointing.

However, while business sentiment has become more restrained, the consumer—the great engine of the American economy and, by extension, the global economy—remains resolutely upbeat. Although some measures of consumer confidence, while still elevated, are now off their peaks, the Bloomberg “Good Time to Buy” Index pictured below, is at all-time highs.

And why not? Americans are enjoying the lowest unemployment rate in more than half a century, rising wage rates, a solid housing market, and an abundance of

Equity views

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

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

savings. Credit card debt is not excessive nor growing fast; delinquencies remain near all-time lows.

This dichotomy between business angst driven by trade uncertainty and a consumer sector willing and able to spend at a rate sufficient to keep the overall economy growing is more or less the state of affairs across the developed world. To change it for the worse will require a more restrictive monetary policy, fiscal policy, or both, in our view. Neither looks likely to arrive anytime soon.

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

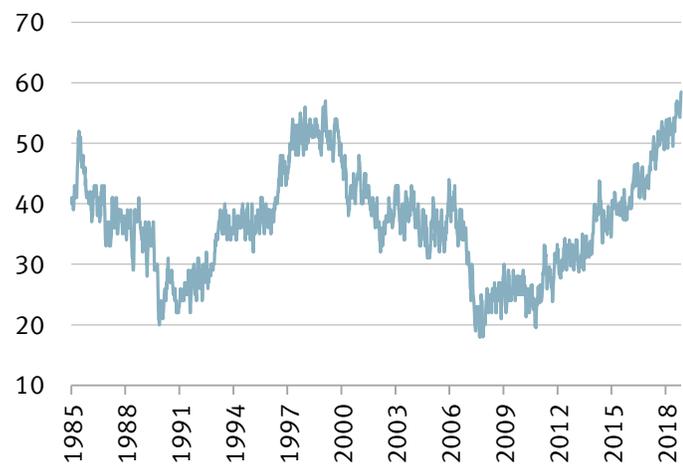
Kelly Bogdanova
San Francisco, United States
kelly.bogdanova@rbc.com

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

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

William Pau
Hong Kong, China
william.pau@rbc.com

Bloomberg U.S. Weekly Buying Climate Positive Net Index



The “mighty” consumer feels good.

Source - RBC Capital Markets, Bloomberg

So, while a couple of warning bells are giving indications a U.S. recession may now be on the horizon, the fact that several other reliable indicators are still sounding the all-clear suggests that “horizon” could be a year or more away.

Earnings for this year are “good enough” and while next year’s estimates are now falling, they are doing so from what were unrealistically optimistic levels. Multiples are reasonable. Investor sentiment has very recently climbed out of a ditch of extreme pessimism to become merely downbeat. Stocks can move higher from here, and we expect they will.

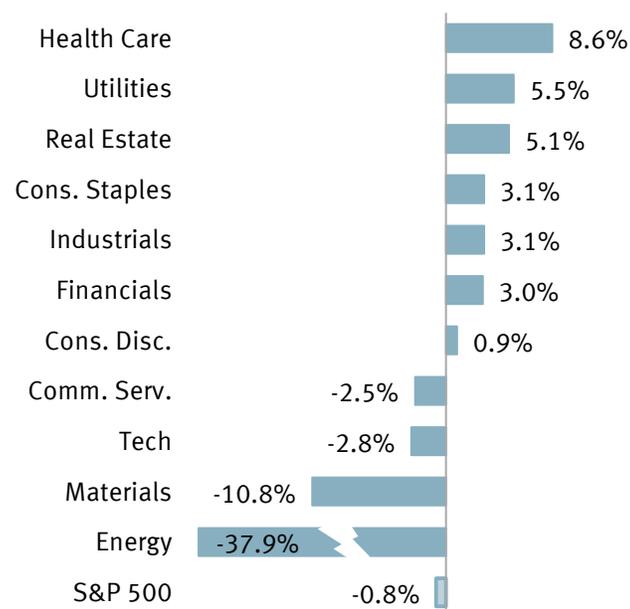
We recommend carrying a Market Weight exposure to equities in a global portfolio. However, we would use any market strength that materializes in coming quarters to pare back inappropriate overweights, to deal with those stocks already encountering business challenges that are likely to get worse in the event of a recession, and to generally de-emphasize those stocks and sectors which require robust GDP growth to thrive.

Regional highlights

United States

- With trade and tariff risks having receded somewhat, and domestic economic data largely holding its own, the market is focused on corporate profits. S&P 500 Q3 earnings are coming in better than feared. When the reporting season began, the consensus forecast was a 3.2% y/y decline in profits. With 68% having reported results so far, the rate has improved to a decline of 0.8%. Despite that negative trend, revenues are growing by 3.7% y/y.
- Four major factors are constraining profits: (1) very difficult comparisons—S&P 500 earnings surged 28.4% in the same period last year, the strongest quarter in years and a high hurdle; (2) Energy sector profits have declined 38% y/y due to lower oil prices; (3) Tech sector profit margins have pulled back, which is natural given the maturation of products and companies; and (4) sluggish global economic growth, some of which is related to the U.S.-

S&P 500 Q3 2019 EPS growth rates, by sector



Despite being on track for a 0.8% contraction thus far, Q3 earnings actually look better today than earlier in the month when consensus estimates forecast 3.2% declines.

Source - RBC Wealth Management, Refinitiv I/B/E/S; data through 10/31/19

China trade dispute, and pockets of domestic economic weakness.

- RBC Capital Markets forecasts S&P 500 earnings growth in 2019 will be just 2.0% y/y, which equates to \$165 per share. For 2020, its lukewarm outlook calls for \$174 per share, 5.5% y/y growth.
- Assuming the global and domestic economies continue to hold together, we think tepid earnings growth will be enough for the market to advance modestly. We remain Market Weight (benchmark) U.S. equities.

Canada

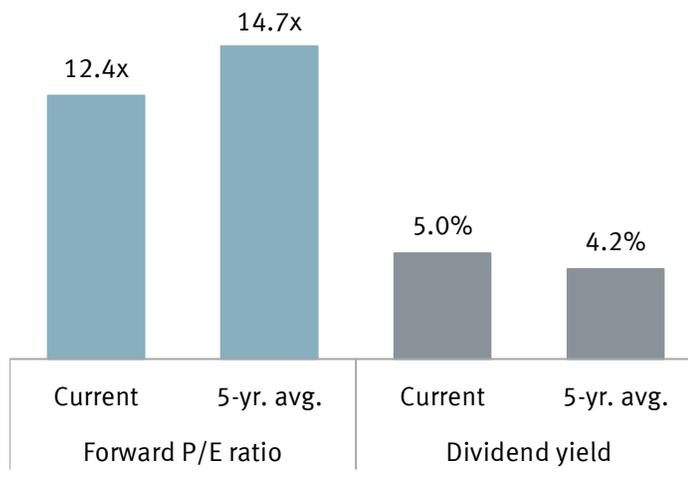
- Canada's Liberal Party claimed victory in the 2019 election albeit in the form of a minority government that will require cooperation with other parties to govern. While the election results do nothing to alter our Market Weight stance on Canadian equities, we expect modestly negative impacts for the Energy sector and Telecom industry.
- RBC Capital Markets believes the Trans Mountain Expansion project is still likely to move forward but with more uncertainty than before the election. We believe the Liberals remain committed to the project having spent CA\$4.5 billion on the existing pipeline and related expansion last year. However, the need to gain support on other parliamentary business from parties that campaigned against the expanded pipeline could prompt further delays in its completion. As such, we expect negative sentiment in Energy to persist.
- The prospect of cooperation between the Liberal minority government and other parties should keep populist rhetoric aimed at the Telecom industry. We expect the Canadian Radio-television and Telecommunications Commission's (CRTC) ongoing review of the wireless industry to present headline risk for incumbent operators.

RBC Capital Markets believes that incremental measures to increase competition and/or lower pricing are a virtual certainty but that they are unlikely to be overly disruptive. We believe a directive to mandate wireless network access to upstart competitors would make for bad policy at a time when the industry is making critical investments in rural connectivity, next-generation 5G networks, and wireless spectrum.

Continental Europe & UK

- We maintain a Market Weight position in UK equities. With Prime Minister Boris Johnson's deal to take the UK out of the EU having commanded an initial majority in the House of Commons and the government having been granted an extension to the exit from the EU, a no-deal Brexit is off the table—for now. The UK equities market is trading at what we view as an attractive valuation of 12.2x 2020E consensus earnings and currently offers a dividend yield of about 5%.
- At the core of UK equity allocation, we believe investors should continue to hold quality stocks that can deliver resilient growth over the long term; these are typically multinational companies. In the short term, however, given recent developments are acting to underpin strength in the pound, which tends to cap the latter's share price gains, we see scope for domestically focused UK stocks' recent outperformance over their international counterparts to continue. Accordingly, we would recommend tactically increasing exposure to select domestically focused stocks.
- Europe is another beneficiary of a no-deal Brexit not materializing, as it removes a potential headwind from the region's struggling economy. However, given the continued softening of the

UK valuations appear reasonably cheap



UK equities appear to be trading at discounted valuations, notably they're offering investors below average valuations with better than average yields.

Note: FTSE 100, forward P/E ratio uses next-twelve-month EPS
Source - RBC Wealth Management, Bloomberg; data through 10/31/19

economy and with a U.S.-EU trade dispute looming, we prefer to maintain our Underweight position in the region. Fiscal policy to prop up the economy would make us more optimistic. For now, we would focus on well-managed companies with strong business models and whose prospects are buoyed by secular growth. This leads us to look for opportunities in the Consumer, Health Care, and Industrials sectors.

Asia

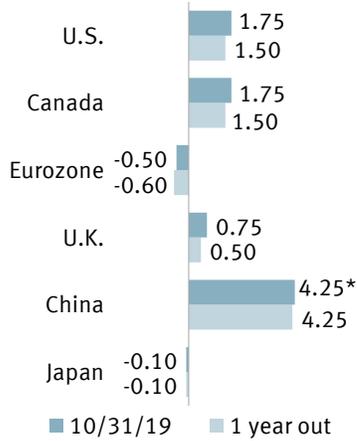
- Even though the Hang Seng Index has made some degree of recovery over the past fortnight, significant improvement in fundamentals has yet to be seen. Despite the Markit Hong Kong Purchasing Managers' Index making a slight comeback in September (41.5 vs. 40.8 in August), escalating violence does not bode well for the local economy. Chief Executive Carrie Lam, during her October 17 Policy Address, highlighted that the city had probably entered into technical recession during Q3, and the economic growth forecast for 2019 has been slashed to just 0.5%, marking a sharp contrast to last year's

3% rise. China's economic slowdown will likely exacerbate the pain, and even when the protests begin to subside, it will take time for the city to recover.

- In mainland China, despite a verbal "phase one" trade agreement with the U.S. in early October, a genuine deal has yet to be struck. China has expressed the desire to have all tariffs removed before reaching a final agreement. Questions surrounding Hong Kong may complicate matters as the U.S. Congress passes the Human Rights and Democracy Act which targets officials in the Special Administrative Region and requires annual certification of Hong Kong's autonomy in order to benefit from special trading status. On the economic front, even though China's Q2 GDP growth of 6% is the shallowest in almost three decades, policymakers could exercise an array of measures to facilitate growth including further reserve requirement trims, infrastructure spending, and additional tax cuts. Finally, any trade truce confirmation with the U.S. should alleviate economic downside risks.

A change of ‘Lagarde’ at the ECB

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

Christine Lagarde became European Central Bank (ECB) president, succeeding Mario Draghi, on November 1, joining the bank after a distinguished career as chairman/managing director of the International Monetary Fund since 2011. It has been noted that she is a lawyer, not an economist by training, as if to suggest the ECB and markets should brace for uncertainty. However, as her tenure begins, we suggest Lagarde will extend the current ECB policies of her predecessor. Furthermore, it is likely Lagarde’s political experience, gained through stints at the IMF and as France’s finance minister, will prove useful in dealing with finance officials from the 19 eurozone economies.

We would point to the U.S. where Jerome Powell became the first person without a doctorate in economics to lead the Federal Reserve. Powell took the helm in 2018 and through his first year continued with the policies of his predecessor Janet Yellen. The current “political hot water” he finds himself in underscores the fact that Lagarde’s political experience/finesse could prove useful.

From “whatever it takes” to beyond

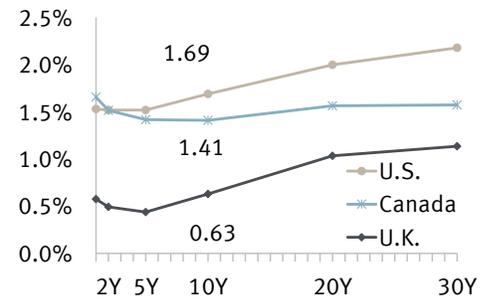
In July 2012, and before he had completed his first year in office, Draghi made a speech in London which proved to be a seminal moment in central bank history. In an environment where bond markets were in crisis about the potential for European sovereign defaults and even the possibility of a eurozone break up, Draghi stepped to the podium and said, “Within our mandate, the ECB is ready to do whatever it takes to preserve the euro. And believe me, it will be enough.” This commitment proved soothing to investors

Fixed income views

Region	Gov’t Bonds	Corp. Credit	Duration
Global	=	+	5–7 yr
United States	=	+	7–10 yr
Canada	=	=	3–5 yr
Continental Europe	=	+	5–7 yr
United Kingdom	=	=	3–5 yr

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

Sovereign yield curves



Source - Bloomberg

(helping to calm market fears) and proved to be one of several policy “bazookas” unleashed by Draghi during his tenure.

This past September, amidst the challenges and uncertainty posed by trade policies and Brexit, the ECB eased policy again, but Draghi’s decision was met with skepticism within the bank, and several former European central bankers openly questioned the move and suggested it was “based upon the wrong diagnosis.”

Lagarde is taking over at a time when global central banks in general are

Craig Bishop

Minneapolis, United States
craig.bishop@rbc.com

Thomas Garretson, CFA

Minneapolis, United States
tom.garretson@rbc.com

Christopher Girdler, CFA

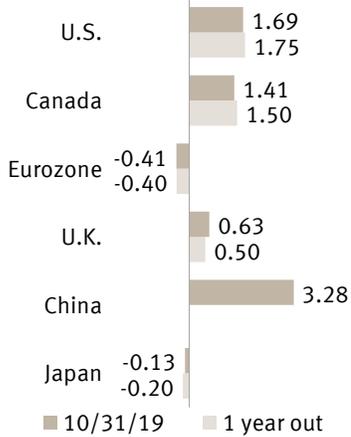
Toronto, Canada
christopher.girdler@rbc.com

Alastair Whitfield

London, United Kingdom
alastair.whitfield@rbc.com

Global fixed income

10-year rate (%)



Note: Eurozone utilizes German Bunds.

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

questioning the effectiveness of accommodative monetary policy tools to stimulate growth and inflation. And as these same bankers call on politicians to do more with fiscal policy, it can be said that successfully bridging the chasm between monetary and fiscal policy will be her immediate challenge and put her political skills to the test. So, initially, we can expect to see a continuation of Draghi's policies, but based upon her career successes, it is probably safe to say Lagarde wasn't hired to maintain the status quo.

Regional highlights

United States

- The Fed cut interest rates for the third time this year at its October 31 meeting to bring short-term rates to a 1.50%–1.75% range. The Fed's efforts thus far have removed the yield curve inversions that sparked earlier recession fears, but that's not to say the U.S. economy is out of the woods just yet. We expect the Fed to pause when it next meets in December as it gauges whether the moves to this point have been sufficient to shore up the economic outlook. Markets continue to price a 50% chance the Fed will reduce rates further early in 2020.

- As interest rates continue to fall, are investors once again "stretching for yield?" Despite rising recession risks, strong demand from high-yield credit investors drove the average yield on the Bloomberg Barclays BB US High Yield Index, the top echelon in the high-yield universe, to a new all-time low of just 3.7%, compared to a 5.4% average since the last recession ended in 2009. In our view, that isn't adequate compensation relative to credit risks at this stage of the economic cycle. We downgraded high-yield corporates to a Negative outlook last month.

- It's increasingly difficult to find value in fixed income, but emerging-market debt is one area we think investors could consider. The yield on the Bloomberg Barclays EM USD Aggregate Index, which carries an average credit rating of BBB-, recently rose to 5.0% for the first time since June, offering a 3.2% yield pickup to U.S. Treasuries which is equal to the average yield advantage this cycle. Though global risks remain, easier central bank policies and improving manufacturing sentiment for China and emerging markets could set the stage for a period of relative outperformance from the EM sector.

Emerging market debt remains pocket of value within fixed income



EM yield advantage over IG corporates looks attractive with easier central bank policies and improving EM manufacturing sentiment.

Source - RBC Wealth Management, Bloomberg; data period: 6/30/09–10/31/19

Canada

- The Canadian economy has proved more resilient than many had expected this year, evidenced by a resurgent housing market and very strong employment backdrop. The bond market has gone from pricing in two interest rate cuts over the next 12 months, as recently as in August, to currently pricing in just half a cut over the same time period. If global bond markets are correct, Canada is set to have the highest policy rate within the G7 by this time next year.
- Given Canada is a small open economy not immune to a deteriorating global growth picture, we think this offers a good opportunity to lock in reasonable yields for the next few years. If the Federal Reserve were to continue moving rates lower in response to slower growth, we would expect the Bank of Canada, likely facing slower growth in that case, would also shift toward easing, especially since not doing so would likely result in an unacceptable appreciation in the Canadian dollar.
- In light of higher bond yields, Canadian preferred share performance has improved of late. Unfortunately, this does little to prevent preferred shares from being the worst-performing asset class this year amongst developed markets. We continue to see their underperformance with a glass-half-full mindset and look favourably at the cash yields available across a good portion of the market.

Continental Europe & UK

- As Mario Draghi's eight-year tenure as European Central Bank president

ended, there were no departing gifts. After September's extensive package of measures from the central bank, for now there is no further action planned and little new information was presented. As Christine Lagarde takes the helm, there is unlikely to be a sea-change to monetary policy in the near term, in our view. Draghi's outgoing message around the need for expansionary fiscal policy is likely to remain, and Lagarde's background as a former finance minister in France lends to a continuation of this rhetoric.

- With German bund yields reversing from recent lows of -0.7% to -0.4%, we still see the challenging economic environment keeping yields low. We therefore remain Market Weight in government bonds and modest Overweight in credit.
- In the UK, with recent economic data showing below-target inflation, a weaker labour market, and slower growth, we expect a change in forward guidance from the current "limited and gradual" tightening bias towards a more accommodative stance. This would then leave the door open to a possible rate cut if needed further down the road. With a delay in the Brexit deadline until early 2020, the Bank of England is likely to notably downgrade its economic forecasts in the November inflation report, which supports the rationale for a change in tone.
- We maintain our Market Weight view on both UK government bonds and UK corporate credit, however acknowledge risks around a potential forthcoming election.

Currencies

Currency forecasts

Currency pair	Current rate	Forecast Sep 2020	Change*
Major currencies			
USD Index	97.35	99.11	2%
CAD/USD	0.75	0.76	1%
USD/CAD	1.31	1.32	0%
EUR/USD	1.11	1.10	-1%
GBP/USD	1.29	1.24	-4%
USD/CHF	0.98	1.04	6%
USD/JPY	108.0	110.0	2%
AUD/USD	0.68	0.66	-4%
NZD/USD	0.64	0.62	-3%
EUR/JPY	120.4	121.0	0%
EUR/GBP	0.86	0.89	3%
EUR/CHF	1.10	1.14	4%
Emerging currencies**			
USD/CNY	7.03	7.20	2%
USD/INR	70.9	71.92	1%
USD/SGD	1.36	1.38	1%

* 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.

** Bloomberg Consensus forecasts

Source - RBC Capital Markets, Bloomberg

U.S. dollar: Flight from safety

The U.S. dollar pulled back from two-year highs as signs of an easing in global risk events including U.S.-China trade and a no-deal Brexit diminished safe-haven demand. Some lacklustre U.S. economic data further weighed on the greenback but does not derail our narrative of a broader ongoing economic expansion, in our view. Against a backdrop of global economies flashing warning signs, broad dollar weakness is unlikely, and we maintain a neutral outlook.

GBP: Brexit breakthrough

The British pound soared to five-month highs in mid-October as final-hour Brexit developments significantly reduced the likelihood of a disorderly exit from the EU on October 31. With notable optimism reflected in the price of sterling, these gains could be capped if the deal is sealed with the EU, in our view, particularly as the shape of the future relationship between the EU and the UK remains to be determined. We believe a neutral outlook is prudent.

Canadian dollar: Carrying on

The Canadian dollar climbed to three-month highs against the U.S. dollar, breaking through the narrow range seen since early August. With an economy

running close to capacity and domestic growth expected to outpace that of the U.S., the Bank of Canada is poised to remain on the sidelines until early 2020, in our view. Against a background of other central banks loosening monetary policy, relatively tighter monetary policy could support Canadian dollar resilience into next year.

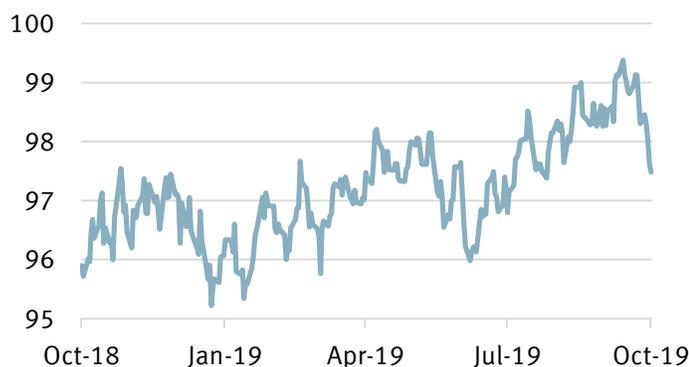
Euro: Bouncing back

The euro bounced back over 2% from decade lows touched against the U.S. dollar in late September. After delivering a “comprehensive” package at its September meeting, the European Central Bank could remain on the sidelines. This “lower-for-longer” stance should limit a material rally, in our view. However, expectations for some country-level fiscal stimulus could lend some support to the currency.

Japanese yen: Capped upside

The yen fell to three-month lows in mid-October, driven by lower global risks reducing safe-haven demand. Growing expectations for policy easing from the Bank of Japan further aggravated the outlook. Negative domestic rates should keep Japanese investors’ demand for higher-yielding assets abroad strong, limiting bouts of strength from safe-haven demand in the process.

U.S. dollar retreats from two-year highs



An easing in global risk events diminishes safe-haven demand for the U.S. dollar.

Blaine Karbonik, CFA
London, United Kingdom
blaine.karbonik@rbc.com

Source - Bloomberg, RBC Wealth Management, data through 10/18/19

Commodities

Commodity forecasts

	2019E	2020E
Oil (WTI \$/bbl)	\$56.88	\$58.07
Natural Gas (\$/mmBtu)	\$2.57	\$2.45
Gold (\$/oz)	\$1,400	\$1,500
Copper (\$/lb)	\$2.74	\$3.00
Soybean (\$/bu)	\$8.95	\$9.13
Wheat (\$/bu)	\$4.90	\$4.73

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

WTI – All hail the kingdom

The oil market experienced its largest-ever supply outage last month, causing a surge in oil prices. WTI prices have since weakened as Saudi Arabia brought production back online in a matter of weeks. This rapid response prevented a supply risk premium on oil, according to RBC Capital Markets strategists who reduced their 2020 WTI forecasts to \$58 from \$62 per barrel despite a tight physical market.



Natural gas – Supply surplus

We believe upside for natural gas prices remains muted, driven by above-average inventory builds. U.S. production has grown at 10%+ y/y while consumption has increased at a more modest 3%. The EIA believes persistent lower prices should lead to slower production growth in 2020. RBC Capital Markets analysts reduced their 2020 forecast to \$2.45/mmBtu. Natural gas prices declined by approximately 11% m/m.



Copper – Quality over quantity

China's Q3 GDP growth slowed to 6%, the lowest in nearly three decades, but its government signaled a greater emphasis on the quality of growth as opposed to magnitude. Stimulative monetary and fiscal policies are more likely to stabilize copper demand than to induce renewed growth, in our view. Trade discussions are dictating copper sentiment. Prices declined roughly 3% m/m.



Gold – The long-awaited divorce

Gold prices appear to have stabilized near \$1500 per ounce since hitting a high of roughly \$1550 earlier this year. The draft Brexit deal announced by the European Union and the United Kingdom lowers geopolitical risk somewhat, in our view. Any additional Fed cuts will create an additional layer of support for gold prices.



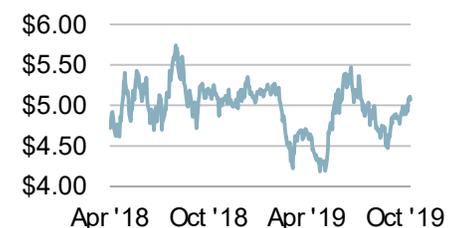
Soybeans – Partial trade deal

A better tone to trade discussions has put a partial trade deal on the table; if signed, it should delay U.S. tariffs on Chinese goods and increase China's imports of U.S. agricultural products. As of August 2019, U.S. soybean exports sat at around \$4.7B compared to \$11B before the trade war. Soybean pricing improved by approximately 6% m/m.



Wheat – No pain, no grains

The USDA is forecasting lower global production in 2019/2020 driven by unfavourable weather conditions in Australia and now the possibility of crop loss/degradation due to early snow in Western Canada, partially offset by higher beginning stocks. Renewed optimism on a partial U.S.-China trade deal sparked a slight rally in wheat prices, up about 4% m/m.



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

Source - RBC Wealth Management, Bloomberg; date range: 4/4/18–10/15/19

— Real GDP growth — Inflation rate

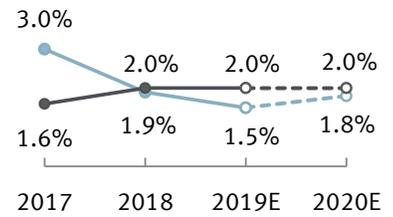
United States – Resilient consumer

Q3 GDP exceeded expectations, up 1.9% q/q, led by robust personal consumption (+4.4% ann.). Nonresidential fixed investment fell the most since 2015 as tariffs bite into business spending and the manufacturing sector remained in contraction. The Fed lowered interest rates for the 3rd consecutive meeting, but didn't signal any further cuts to come. Consumer confidence is off its peak as new hiring continues to slow, historically a late-cycle phenomena.



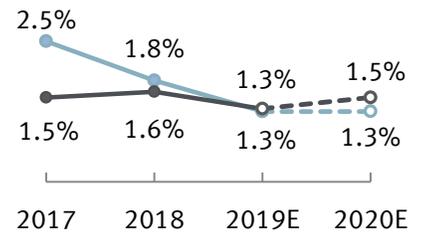
Canada – Dovish tone

The Liberals lost their majority in the federal election but will lead a minority government. As a result the carbon tax will stay and tougher telecom infrastructure regulations are more likely. Despite trade disputes, Canada's economy has remained relatively unscathed to date. The Bank of Canada left interest rates unchanged at 1.75% at its October meeting; however, officials shifted to a dovish tone cutting GDP growth forecasts for the next two years.



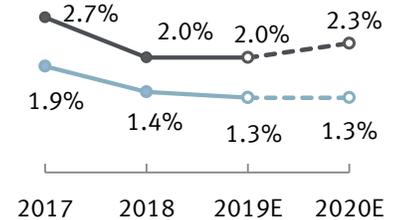
Eurozone – Economic growth stalling

Weakness in manufacturing is showing signs of spilling over to the services sector, with Q3 GDP for the 19-nation economy expanding 0.2% q/q. Germany is expected to enter a technical recession. With the ECB already implementing monetary stimulus, outgoing ECB President Mario Draghi called for coordinated fiscal stimulus measures to promote growth. Leading indicators don't point to a return to growth before early next year, but don't signal a deep recession either.



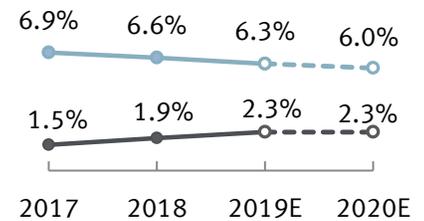
United Kingdom – Progress toward a resolution

Brexit has taken a toll on consumer/business sentiment. Q3 GDP expected to fall 0.2% Q/Q. An extension of the Brexit deadline to January 31, 2020, greatly reduces the risk of a hard Brexit, in our view. BoE Governor Carney welcomed the extension indicating it could lead to a pickup in growth especially investment. Markets are pricing no change in rates from the BoE, but we believe a Brexit deal could put rate hikes back on the table.



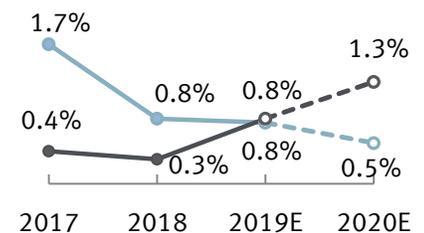
China – Signs from stimulus

"Phase 1" of the U.S.-China trade truce is in the works, although the dispute is far from fully resolved. China imports fell 8.5% y/y marking the ninth decline in 10 readings and dragging on global growth. Exports decreased 3.2% y/y, and tariffs continue to slow activity. However, there is tentative evidence stimulus efforts are beginning to bear fruit with money supply, credit, retail sales, and new home sales all moving higher.



Japan – September spending surge

The BoJ is expected to refrain from any additional stimulus as downward pressure on the yield curve dissipated with a global bond market selloff, sending the yen higher. September retail sales jumped 7.1% m/m (expected 3.5%), as consumers made purchases ahead of the 2% October 1 sales tax hike. Consumer spending has provided crucial economic support as the U.S.-China trade war and cooling tech demand weigh on global growth and Japanese exports.



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	3,037.56	2.0%	21.2%	12.0%
Dow Industrials (DJIA)	27,046.23	0.5%	15.9%	7.7%
NASDAQ	8,292.36	3.7%	25.0%	13.5%
Russell 2000	1,562.45	2.6%	15.9%	3.4%
S&P/TSX Comp	16,483.16	-1.1%	15.1%	9.7%
FTSE All-Share	3,993.46	-1.7%	8.7%	2.3%
STOXX Europe 600	396.75	0.9%	17.5%	9.7%
EURO STOXX 50	3,604.41	1.0%	20.1%	12.7%
Hang Seng	26,906.72	3.1%	4.1%	7.7%
Shanghai Comp	2,929.06	0.8%	17.4%	12.5%
Nikkei 225	22,927.04	5.4%	14.6%	4.6%
India Sensex	40,129.05	3.8%	11.3%	16.5%
Singapore Straits Times	3,229.88	3.5%	5.3%	7.0%
Brazil Ibovespa	107,219.80	2.4%	22.0%	22.6%
Mexican Bolsa IPC	43,337.28	0.8%	4.1%	-1.4%
Bond yields	10/31/19	9/30/19	10/31/18	12 mo. chg
US 2-Yr Tsy	1.524%	1.622%	2.867%	-1.34%
US 10-Yr Tsy	1.691%	1.665%	3.144%	-1.45%
Canada 2-Yr	1.518%	1.580%	2.338%	-0.82%
Canada 10-Yr	1.412%	1.361%	2.494%	-1.08%
UK 2-Yr	0.503%	0.369%	0.751%	-0.25%
UK 10-Yr	0.629%	0.488%	1.437%	-0.81%
Germany 2-Yr	-0.660%	-0.766%	-0.618%	-0.04%
Germany 10-Yr	-0.407%	-0.571%	0.385%	-0.79%
Commodities (USD)	Price	1 month	YTD	12 month
Gold (spot \$/oz)	1,512.99	2.8%	18.0%	24.5%
Silver (spot \$/oz)	18.11	6.5%	16.9%	27.1%
Copper (\$/metric ton)	6,486.50	1.3%	-3.0%	-4.4%
Uranium (\$/lb)	20.90	-0.5%	-12.6%	-7.7%
Oil (WTI spot/bbl)	54.18	0.2%	19.3%	-17.0%
Oil (Brent spot/bbl)	60.23	-0.9%	12.0%	-20.2%
Natural Gas (\$/mmBtu)	2.63	13.0%	-10.4%	-19.3%
Agriculture Index	273.20	1.6%	0.5%	0.7%
Currencies	Rate	1 month	YTD	12 month
US Dollar Index	97.3520	-2.0%	1.2%	0.2%
CAD/USD	0.7597	0.6%	3.6%	0.0%
USD/CAD	1.3164	-0.6%	-3.5%	0.1%
EUR/USD	1.1152	2.3%	-2.7%	-1.4%
GBP/USD	1.2942	5.3%	1.5%	1.4%
AUD/USD	0.6894	2.1%	-2.2%	-2.5%
USD/JPY	108.0300	0.0%	-1.5%	-4.3%
EUR/JPY	120.4900	2.3%	-4.2%	-5.7%
EUR/GBP	0.8617	-2.8%	-4.1%	-2.8%
EUR/CHF	1.1001	1.2%	-2.3%	-3.6%
USD/SGD	1.3603	-1.6%	-0.2%	-1.8%
USD/CNY	7.0391	-1.5%	2.3%	0.9%
USD/MXN	19.2332	-2.5%	-2.1%	-5.4%
USD/BRL	4.0183	-3.3%	3.7%	7.9%

The S&P 500 hit new all-time highs in October as downside risks to the global economy diminished, although are far from resolved.

All short-term government bond yields rose in October as markets repriced the need for more aggressive rate cuts by central banks.

Natural gas was October's best-performing commodity as colder-than-normal weather is forecast across the U.S., potentially boosting demand.

The British pound saw a sharp rally in October as progress toward a "smooth Brexit" continued to be made.

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 0.75 means 1 Canadian dollar will buy 0.75 U.S. dollar. CAD/USD 0% return means the Canadian dollar is even with the U.S. dollar during the past 12 months. USD/JPY 108.03 means 1 U.S. dollar will buy 108.03 yen. USD/JPY -4.3% return means the U.S. dollar has fallen 4.3% vs. the yen during the past 12 months.

Source - RBC Wealth Management, RBC Capital Markets, Bloomberg; data through 10/31/19.

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, RBC Wealth Management, RBC Europe 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

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

Thomas 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.

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

Michael Schuette, CFA – Multi-Asset Portfolio Strategist, RBC Wealth Management Portfolio Advisory Group – U.S., RBC Capital Markets, LLC

Alastair Whitfield – Head of Fixed Income – British Isles, RBC Wealth Management, RBC Europe 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:

Blaine Karbonik, CFA – Associate, FX and Structured Products Specialist, RBC Wealth Management, RBC Europe Limited

William Pau – U.S. Equity Analyst, RBC Wealth Management Hong Kong, RBC Investment Services (Asia) Limited

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, Patrick McAllister, and Richard Tan, employees of RBC Wealth Management USA's foreign affiliate RBC Dominion Securities Inc.; Frédérique Carrier, Blaine Karbonik, and Alastair Whitfield, employees of RBC Wealth Management USA's foreign affiliate RBC Europe Limited; and William Pau, 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), and the Guided Portfolio: All Cap Growth (RL 12). 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 abbrevia-

tion '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 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.

Rating	Count	Percent	Investment Banking Services Provided During Past 12 Months	
			Count	Percent
Buy [Top Pick & Outperform]	748	51.73	208	27.81
Hold [Sector Perform]	618	42.74	126	20.39
Sell [Underperform]	80	5.53	3	3.75

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 have received (or will receive) 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 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; by Royal Bank of Canada, Singapore Branch, a licensed wholesale bank with its principal office located in Singapore; and by RBC Europe Limited, a licensed bank 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, indirect or consequential loss arising from, or in connection with, 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 written consent of Royal Bank of Canada in each instance. 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 RBC Europe Limited and RBC Investment Solutions (CI) Limited. RBC Europe Limited is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority (FCA registration number: 124543). 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.

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