

Global Insight

Weekly

Breaking the Brexit impasse?

Frédérique Carrier – London

The Brexit saga has dragged on and on ... and on. It has constrained global growth by holding back the UK and European economies, casting a shadow over equity markets. While there is light at the end of the long tunnel, there are various outcomes from next month's UK general election for global investors to consider.

What is the Withdrawal Agreement deal?

The first part of Prime Minister Boris Johnson's Withdrawal Agreement (WA) defines the legally binding terms of the UK's exit from the EU: leave the bloc on Jan. 31, 2020, with a one-year transition period which maintains the status quo. The two sides could agree to a one-off extension lasting two years if requested before July 1, 2020.

The second, non-legally binding part, suggests what the trading relationship could look like beyond Dec. 2020: a very loose free trade agreement (FTA) that includes limited regulatory harmonization and zero tariffs on goods (the deal does not cover services).

The UK government aims to finalize the FTA quickly and to start trading under these new terms from Jan. 2021. If the FTA is not in place by then, trade would commence under WTO rules. The estimated impact of Johnson's deal on the economy varies (see table).

General election scenarios

The outcome of the general election may yet alter Brexit's course. Given current polls, we see three viable scenarios: a Conservative majority, a Conservative-led minority, or a Labour-led minority.

Conservative majority government

If the Conservatives maintain their current 10% lead in the polls they would likely win a majority in the House of Commons.

Long-term impact of various Brexit outcomes on UK GDP

Johnson's Withdrawal Agreement is a harder form of Brexit than Theresa May's

	Johnson's Withdrawal Agreement	May's Withdrawal Agreement	Hard Brexit (WTO terms)
London School of Economics	-6.4%	-4.9%	-8.2%
UK in a Changing Europe	-5.8% to -7.0%	-5.5%	-8.7%

Source - National research correspondent

Market pulse

- 3 U.S. inflation tame, even with a strong consumer backdrop
- 3 Labor market is a pillar of strength for Canada's economy
- 3 Upgrading European equities (ex UK) to Market Weight
- 4 Japan's economic growth slumps

Click [here](#) for authors' contact information. Priced (in USD) as of 11/14/19 market close, ET (unless otherwise stated). **For important disclosures and required non-U.S. analyst disclosures, see [page 6](#)**
Disseminated: Nov 14, 2019 15:46ET; Produced: Nov 14, 2019 15:26ET



**Wealth
Management**

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.

Brexit Party leader Nigel Farage agreeing not to field candidates in constituencies won by the Conservatives in 2017 could help them retain seats. But Farage's help comes at a price: assurances an extension to the transition period beyond 2020 will not be sought.

With a Conservative majority, we would expect the WA to pass swiftly, perhaps in time for the UK to exit the EU on Jan. 31, 2020 in an orderly fashion (with a one-year transition period). We would expect the pound to initially react positively to this, as it would give clarity to an immediate exit. Gains may be limited given the currency's recent rally and attention soon turning to the extension request and life after the transition period.

If an amendment were to pass eliminating a transition, or if the government were to decline to request an extension, it would be crucial to finalize the FTA with the EU before the end of 2020, a colossal task, to avoid trading on WTO terms (i.e., a no-deal Brexit) from 2021.

Conservative minority government (hung Parliament)

But if the Conservatives are unable to win a majority, more Brexit gridlock is likely.

We would expect more attempts at amending the WA, with a view to effect a softer Brexit (including a longer transition period, Parliament's involvement in an extension request, or more regulatory harmonization). A second referendum would be seen as another way to break the impasse, and would be possible. The pound would probably fall in the near term given this uncertainty and investors adopting a wait-and-see attitude.

Labour minority government

We would expect the Scottish National Party (SNP) and the Liberal Democrats to enter into "confidence and supply" arrangements with the Labour Party. These are more flexible than coalitions, allowing votes against the government on certain issues.

Labour has stated it would seek to renegotiate the WA to soften it, and then put it to a referendum. The price for the SNP's support would likely be a second referendum on Scottish independence.

Although sterling could rise in the short term on hopes of a second Brexit referendum or softer exit from the EU, the move could be short-lived as the complexities of reshaping Brexit and fears of Labour's left-wing policies weigh on the outlook. We note that in a minority government, Labour's most extreme policies are unlikely to be enacted.

Bank of England: It depends ...

The Bank of England (BoE) recently struck a dovish tone and lowered its growth and inflation forecasts. Future moves clearly depend on how the election plays out. Under a

Scenario analysis

CONSERVATIVE MAJORITY

Brexit: No delay; UK exits Jan. 31, 2020; amendments to bar extending transition possible

Economic policy: Fiscal stimulus: GBP 30B (1.5% GDP)

GBP impact: Stable/up near term on greater clarity; attention turns to trade relationship after transition period

CONSERVATIVE MINORITY

Brexit: Lengthy delays; impasse continues; 2nd referendum possible

Economic policy: Delays in delivery of fiscal stimulus

GBP impact: Down near term on uncertainty; amendments to WA could be positive

LABOUR MINORITY

Brexit: Lengthy delays; 2nd referendum most likely

Economic policy: Fiscal stimulus

GBP impact: Near term positive on 2nd referendum & possible softer Brexit could be outweighed by fears of left-wing policies

LABOUR MAJORITY

Brexit: Delays; attempts to renegotiate (political declaration); 2nd referendum possible

Economic policy: Fiscal stimulus; nationalisations

GBP impact: Down on fears of extreme Labour policies

Source - RBC Wealth Management

majority Conservative government endorsing a quick Brexit, the BoE may stay on hold as long as the economy does not weaken further. It could readopt a tightening bias if large fiscal stimulus fosters inflationary pressures and the economy proves resilient. In the case of a hung Parliament or Labour minority government and more Brexit delays, with uncertainty remaining entrenched, a rate cut would be more likely.

Portfolio strategy

We remain Market Weight on UK equities as valuations appear attractive. We recently changed our bias from internationally focused companies to a more balanced approach between those and domestic-centric firms. We like banks and consumer stocks in particular. Investors will need to continue to be nimble.

We are Market Weight on UK Gilts, reflecting the BoE's dovish tone, and on sterling-denominated investment-grade corporate bonds, which offer attractive yield pickup, though investors should continue to be selective.



United States

Alan Robinson – Seattle

- The resiliency of the consumer space was in focus during the week. **Walt Disney Co. (DIS) stock hit a record high on Nov. 13 on news its Disney+ channel gained 10 million subscribers one day after its debut across five launch countries.** The 7.3% gain in the stock increased the value of the company by an eye-watering \$1,700 per new subscriber, and refocused investor attention on the disruptive nature and profit potential behind the ongoing streaming wars. **The strength of the U.S. consumer was underlined by a robust report from retail stalwart Walmart Inc. (WMT).** The company reported same-store sales growth of 3.2% y/y for Q3, with healthy growth in both foot traffic and ticket size.
- **In Fed Chair Jerome Powell's testimony to Congress, he reiterated his view that interest rates will remain on hold after three straight reductions.** He signaled that the U.S. central bank could resume cutting if the growth outlook falters, but that the bar for a change in either direction was unusually high. The market is now on the same page as the Fed in terms of keeping rates on hold for the time being, but only until June of next year, when the market is first pricing a greater than 50% chance of another cut.
- **As if to underscore Powell's views, U.S. inflation data for October provided a mixed message.** The headline Consumer Price Index (CPI) increased faster than expected at 0.4% m/m and 1.8% y/y, but this was explained by higher fuel costs. Core CPI barely eked out a 0.2% m/m gain, or up 2.3% y/y, a slight drop from the previous month. We believe the U.S. consumer remains in good shape due to the strong jobs market but has been conditioned to resist paying higher prices for goods and services. This suggests a "Goldilocks" situation for the economy in which spending power is not too cold and inflation is not too hot.



Canada

Ryan Harder & Meika McKelvey – Toronto

- **Higher Canadian yields this month are reflecting a noteworthy shift in the narrative of bond markets:** alongside some positive trade headlines out of the U.S., inflation expectations have moved higher amid an apparent shift from interest rate cuts to asset purchases by the Federal Reserve. Government of Canada bond yields have stalled at this point three times in the past three months, with the 5-year yield settling near the 1.55% mark this week. With essentially no cuts from the Bank of Canada

Inflation remains tame, even against a strong consumer backdrop

U.S. Consumer Price Index



Note: Monthly data series shows annual change in headline inflation
Source - RBC Wealth Management, Bureau of Labor and Statistics

priced in at these levels, **it's difficult to see intermediate yields climbing significantly higher** absent a material improvement to the economic outlook.

- After adding 135,000 jobs in August and September combined, **Canadian employment showed some natural give-back in October**, with the number of jobs in the economy declining by a marginal 1,800 on the month. Apart from the employment decline, other details of the October report were quite constructive. The unemployment rate held steady at 5.5%, and average hourly earnings growth for permanent workers remained elevated, ticking up to 4.4% y/y. With roughly 440,000 jobs being added over the past year, the unemployment rate sitting just above multi-decade lows, and the wage picture continuing to improve, **the labour market remains a pillar of strength for the Canadian economy.**



Europe

Frédérique Carrier & Thomas McGarrity, CFA – London

- **We are upgrading European equities (ex UK) to Market Weight from Underweight for investments with a time horizon of 12 months or longer.** Political headwinds such as a populist government in Italy and a hard Brexit have not materialized, and the regional economy is showing signs of bottoming. If U.S.-China trade tensions abate and global economic momentum picks up, Europe, as an open economy, is poised to benefit.

- **The October Markit Eurozone Composite Purchasing Managers' Index ticked up to 50.6**, better than consensus expectations, thanks to the downturn in manufacturing moderating and services strengthening. German exports, the largest sore point, were up 1.5% in September, and August numbers were revised upward.
- Moreover, support for fiscal stimulus is becoming more persistent. With a primary fiscal balance of 1% of GDP, **the eurozone has the firepower to stimulate its economy. However, it is held back by stringent rules** which stipulate that a member country's deficit should not exceed 3% of its GDP and government debt should be less than 60% of its GDP. These rules were set when eurozone economies were growing at a nominal rate (real rate plus inflation) of 5%. With growth now hovering around 2%, **authorities are realizing that these rules would benefit from some modernization.**
- Former ECB President Mario Draghi's call for fiscal policy to enhance the work of monetary policy was reiterated by the new President, Christine Lagarde. The incoming EU Commission has also said it would adopt a "more lenient" approach to budgeting. In fact, France, Italy, and the Netherlands are already pushing those limits, though Germany still hesitates. **We don't expect game-changing fiscal stimulus, but we think this theme will become increasingly important going forward.** The current consensus forecast estimates fiscal stimulus of some 0.3% of GDP for 2020 may well inch up, which would underpin the recovery.
- We are mindful that European equities have had a good run over the past few months, along with other equity markets, but **valuations relative to the U.S. remain below long-term averages** when adjusting for sector differences.



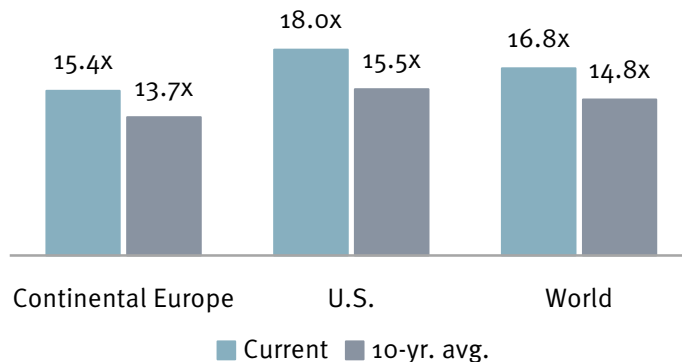
Asia Pacific

Jasmine Duan – Hong Kong & Nicholas Gwee, CFA – Singapore

- **Asian markets traded mostly lower for the week** led by Hong Kong. The Hang Seng Index struggled as **anti-government protesters paralyzed parts of the Asian financial hub** for a fourth day. All schools in Hong Kong have suspended classes until Sunday due to transportation and safety reasons. Big banks on the island have been sending out safety memos with the latest edition expressing an even higher level of caution.
- **Trade talks between the U.S. and China may have hit a snag.** According to *The Wall Street Journal*, Beijing is hesitant

Continental Europe upgrade comes with lower relative valuations

Price-to-earnings (P/E) ratios using next-twelve-month EPS estimates



Note: MSCI Europe Ex-UK Index, S&P 500, and MSCI World Index
Source - RBC Wealth Management, Bloomberg; data through 11/13/19

to commit to a specific amount of agricultural product purchases in the text of a potential deal. U.S. President Donald Trump claimed last month that China had agreed to buy up to \$50 billion in farm goods as part of the "phase one" trade deal.

- **Japan's economic growth slowed significantly in the third quarter.** GDP increased only 0.2% q/q, down from 1.8% in Q2 and missed economists' forecast of 0.9%. **A decline in exports amid ongoing global trade tensions outweighed growth in domestic demand.** Household spending and retail sales surged in September as consumers front-loaded purchases ahead of the value-added tax hike that was implemented on October 1, but the consumer activity was not enough to offset trade headwinds. Furthermore, **factory activity sank** to a three-year low and services sector activity shrank for the first time in three years. Market participants believe the latest Purchasing Managers' Index data may have increased the likelihood of further fiscal and monetary stimulus.
- **Alibaba's Singles Day sales** (a shopping holiday in China akin to Black Friday in the U.S.) **hit a record high of \$38.4 billion**, slightly ahead of market expectations. Sales growth of 26% y/y, however, was the lowest since the event started in 2009 and was held back by slowing e-commerce activity due to China's softer economic growth. Separately, according to an unconfirmed CNBC report on November 13, **Alibaba's secondary listing in Hong Kong is likely to take place in the last week of November** and could raise around \$13 billion. Alibaba received the green light from the regulators on Tuesday to proceed with the share sales, according to the report.



MARKET SCORECARD

Data as of November 14, 2019

Equities (local currency)	Level	MTD	YTD	1 yr	2 yr
S&P 500	3,096.63	1.9%	23.5%	14.6%	20.1%
Dow Industrials (DJIA)	27,781.96	2.7%	19.1%	10.8%	18.7%
NASDAQ	8,479.02	2.3%	27.8%	18.8%	25.8%
Russell 2000	1,588.79	1.7%	17.8%	5.7%	8.0%
S&P/TSX Comp	16,972.18	3.0%	18.5%	12.2%	6.7%
FTSE All-Share	4,020.95	0.7%	9.4%	4.1%	-1.2%
STOXX Europe 600	404.41	1.9%	19.8%	11.6%	5.4%
EURO STOXX 50	3,688.81	2.3%	22.9%	15.1%	3.7%
Hang Seng	26,323.69	-2.2%	1.8%	2.6%	-9.7%
Shanghai Comp	2,909.87	-0.7%	16.7%	10.5%	-15.2%
Nikkei 225	23,141.55	0.9%	15.6%	5.9%	3.4%
India Sensex	40,286.48	0.4%	11.7%	14.6%	22.3%
Singapore Straits Times	3,231.85	0.1%	5.3%	6.2%	-4.9%
Brazil Ibovespa	106,556.90	-0.6%	21.2%	23.9%	50.4%
Mexican Bolsa IPC	43,188.69	-0.3%	3.7%	2.0%	-9.8%
Commodities (USD)	Price	MTD	YTD	1 yr	2 yr
Gold (spot \$/oz)	1,471.22	-2.8%	14.7%	21.5%	14.9%
Silver (spot \$/oz)	17.03	-5.9%	9.9%	20.5%	0.1%
Copper (\$/metric ton)	5,810.50	0.7%	-2.3%	-4.9%	-13.5%
Oil (WTI spot/bbl)	56.77	4.8%	25.0%	0.9%	1.9%
Oil (Brent spot/bbl)	62.38	3.6%	15.9%	-5.7%	0.3%
Natural Gas (\$/mmBtu)	2.64	0.4%	-10.1%	-45.3%	-14.8%

Govt bonds (bps chg)	Yield	MTD	YTD	1 yr	2 yr
U.S. 10-Yr Tsy	1.817%	12.6	-86.7	-130.8	-55.5
Canada 10-Yr	1.469%	5.7	-49.8	-96.5	-48.2
U.K. 10-Yr	0.709%	8.0	-56.8	-79.7	-61.2
Germany 10-Yr	-0.351%	5.6	-59.3	-74.9	-74.8
Fixed Income (returns)	Yield	MTD	YTD	1 yr	2 yr
U.S. Aggregate	2.35%	-0.7%	8.1%	10.5%	8.6%
U.S. Invest Grade Corp	2.95%	-0.8%	13.0%	14.3%	11.5%
U.S. High Yield Corp	5.71%	0.1%	11.9%	9.0%	10.7%
Currencies	Rate	MTD	YTD	1 yr	2 yr
U.S. Dollar Index	98.1820	0.9%	2.1%	1.4%	4.6%
CAD/USD	0.7548	-0.6%	2.9%	0.0%	-3.9%
USD/CAD	1.3248	0.6%	-2.9%	0.0%	4.1%
EUR/USD	1.1020	-1.2%	-3.9%	-2.6%	-6.6%
GBP/USD	1.2880	-0.5%	1.0%	-0.9%	-2.2%
AUD/USD	0.6786	-1.6%	-3.7%	-6.2%	-11.1%
USD/JPY	108.4300	0.4%	-1.1%	-4.6%	-4.4%
EUR/JPY	119.4800	-0.8%	-5.0%	-7.0%	-10.7%
EUR/GBP	0.8556	-0.7%	-4.8%	-1.7%	-4.5%
EUR/CHF	1.0895	-1.0%	-3.2%	-4.3%	-6.7%
USD/SGD	1.3617	0.1%	-0.1%	-1.3%	0.2%
USD/CNY	7.0208	-0.3%	2.1%	1.0%	5.8%
USD/MXN	19.3212	0.5%	-1.7%	-5.3%	0.8%
USD/BRL	4.1892	4.3%	8.1%	10.7%	26.4%

Source - Bloomberg. Note: Equity returns do not include dividends, except for the Brazilian Ibovespa. Bond yields in local currencies. Copper Index data and U.S. fixed income returns as of Wednesday's close. 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. Data as of 8:35 pm GMT 11/14/19.

Examples of how to interpret currency data: CAD/USD 0.75 means 1 Canadian dollar will buy 0.75 U.S. dollar. CAD/USD 2.9% return means the Canadian dollar rose 2.9% vs. the U.S. dollar year to date. USD/JPY 108.43 means 1 U.S. dollar will buy 108.43 yen. USD/JPY -1.1% return means the U.S. dollar fell 1.1% vs. the yen year to date.

Authors

Frédérique Carrier – London, United Kingdom

frederique.carrier@rbc.com; RBC Europe Limited

Alan Robinson – Seattle, United States

alan.robinson@rbc.com; RBC Capital Markets, LLC

Meika McKelvey – Toronto, Canada

meika.mckelvey@rbc.com; RBC Dominion Securities Inc.

Ryan Harder – Toronto, Canada

ryan.harder@rbc.com; RBC Dominion Securities Inc.

Thomas McGarrity, CFA – London, United Kingdom

thomas.mcgarritty@rbc.com; RBC Europe Limited

Jasmine Duan – Hong Kong, China

jasmine.duan@rbc.com; RBC Investment Services (Asia) Limited

Nicholas Gwee, CFA – Singapore

nicholas.gwee@rbc.com; Royal Bank of Canada, Singapore Branch

Disclosures and Disclaimer

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: Ryan Harder and Meika McKelvey, employees of RBC Wealth Management USA's foreign affiliate RBC Dominion Securities Inc.; Frédérique Carrier and Thomas McGarrity, employees of RBC Wealth Management USA's foreign affiliate RBC Europe Limited; Jasmine Duan, an employee of RBC Investment Services (Asia) Limited; and Nicholas Gwee, an employee of Royal Bank of Canada, Singapore Branch 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 abbreviation 'RL Off' means the date a security was removed from a Recommended List.

Distribution of Ratings

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

Distribution of Ratings - RBC Capital Markets, LLC Equity Research				
As of September 30, 2019				
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.

Research Resources

This document is produced by the Global Portfolio Advisory Committee within RBC Wealth Management's Portfolio Advisory Group. The RBC WM 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.

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. 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.

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

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

© RBC Europe Limited 2019

© Royal Bank of Canada 2019

All rights reserved

RBC1253