August 2018

RBC WEALTH MANAGEMENT

Global Insight

Focus Article

Thorny trade routes

While the tariff skirmishes may involve more fireworks, we think the trade standoffs will ultimately be manageable for economies and markets

Kelly Bogdanova

For important and required non-U.S. analyst disclosures, see page 8

All values in U.S. dollars and priced as of July 31, 2018, market close, unless otherwise noted.

RBC Wealth Management

Focus article

Thorny trade routes

The U.S. and China are continuing to turn up the heat in their game of brinkmanship. And while the U.S. has made some progress on some fronts with other major trading partners, thorny issues remain, particularly on a NAFTA reboot. Investors should be vigilant about potential volatility, but unless the skirmishes metastasize into a full-blown trade war we think economies and markets will weather this uncertainty.

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

Months of heated rhetoric and threats of hundreds of billions of dollars in tariffs have given way to constructive dialogue between the U.S. and two of its major trading partners, the EU and Mexico.

Meanwhile, trade relations between the U.S. and China are closer to reaching a boiling point, and more give-and-take is required to achieve a NAFTA reboot.

Our economists believe the global and U.S. economies are strong enough to withstand trade challenges, especially given the worst-case scenario of a full-on global trade war seems unlikely.

But financial markets may be confronted with tougher and more provocative rhetoric and perhaps additional tariffs before the bulk of trade issues are resolved.

A bull in a China shop?

The U.S.-China trade relationship is the most complicated and has the highest stakes, in our view.

This conflict could crystallize in coming weeks as the U.S. determines whether to make good on its threat to slap tariffs on another $200B in Chinese imports. The Trump administration turned the heat up recently by raising the possibility this

U.S. trade scenarios, from worst to best case

Scenario	Worst case	Negative	Slightly negative	Neutral	Best case
Likelihood	20%	25%	30%	15%	10%
Detail	Trade war	Substantial increase in tariffs	Several smallish tariffs	Reversal of Trump tariffs	Foreign barriers fall due to pressure

- Most trade models say protectionism damage would be fairly small.
- In the meantime, trade uncertainty is likely to drag on the economy.
- Integrated supply chains increase potential damage for multinationals.

Source - RBC Global Asset Management

could be a 25% tariff, rather than 10% as it had previously signaled. A formal review of this policy is ongoing and a decision is possible after September 5.

China's response to any U.S. actions—whether it decides to counter or negotiate—may be even more important in determining the near-term direction of this trade dispute. After learning Washington may up its tariff to 25%, the foreign ministry spokesman said, "… pressure and blackmail from the U.S. won't work." China has repeatedly warned it will retaliate if additional tariffs are imposed.

Select industries in both countries are showing signs of strain from the modest tariffs already in place, but neither economy is showing lasting scars. Should the tariffs keep mounting, we view the Chinese economy as more vulnerable due to its already well-entrenched path toward a slower growth rate.

For more about the root causes of the U.S.-China trade dispute, see "In the trenches of the trade dispute" on page 9.

U.S.-EU ceasefire

We never viewed an all-out trade war between the U.S. and EU as a credible risk. Consider the "deal" low-hanging fruit.

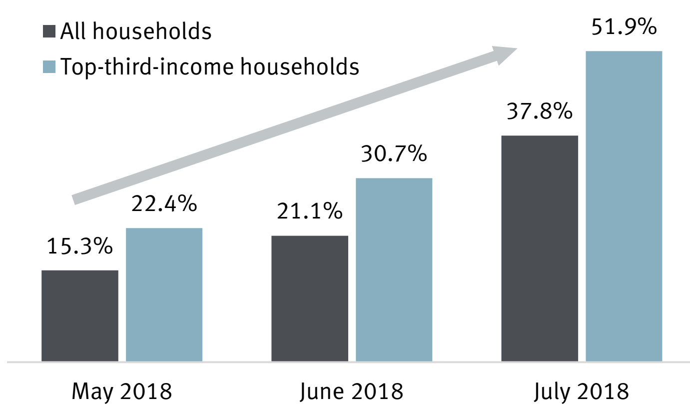
The U.S. and EU are moving in the right direction—even if their initial "deal" to negotiate a formal trade agreement was skinny on details and, in some respects, seemed like a solution in search of a problem. We never viewed an all-out trade war between the U.S. and EU as a credible risk. Consider the "deal" low-hanging fruit.

The U.S.-EU framework lays the groundwork for broad, constructive trade talks with the goal of reaching zero tariffs on most industrial goods, and tackles some thorny issues that have concerned markets.

It unwound the Trump administration's auto tariff threat, which was highly unpopular with manufacturers and parts companies on both sides of the Atlantic, many market participants, and even some U.S. administration trade officials. The two sides will refrain from levying tariffs against each other on autos and other goods, as long as formal trade negotiations are ongoing. But U.S. tariffs on non-EU automakers and auto parts companies, such as in Mexico, Canada, and Asia, are still a risk.

Trade tariffs worry U.S. consumers

% of respondents who made negative references to potential impact of tariffs



Tariff concerns have risen among all consumers, and especially the top third of households.

Source - RBC Global Asset Management, University of Michigan Surveys of Consumers

The U.S. and EU also committed to "resolve" the steel and aluminum tariffs and counter-tariffs that came into effect recently. This would be positive for the industrial sector as high raw materials prices have squeezed profits. But once again, it doesn't address the existing steel and aluminum tariffs on non-EU countries, including on Canada, the biggest steel importer into the U.S.

It's difficult for us to reconcile this U.S.-EU goal on steel tariffs with President Trump's enthusiastic appearance at a U.S. Steel plant in Illinois shortly after the EU deal. He told the crowd of steel workers, "After years of shutdowns and cutbacks, today the blast furnace here in Granite City is blazing bright, workers are back on the job and we are once again pouring new American steel into the spine of our country … Thanks to our tariffs, idle factories throughout our nation are roaring back to life." To us, this doesn't seem like a president who is ready to *fully* "resolve" the steel issue—with the EU maybe, but perhaps not with all countries.

This is the reality check when it comes to tariffs. Once they are put in place, they are difficult to unwind because real people and political constituencies benefit from them.

NAFTA: Reaching for a reboot

Patience still seems warranted when it comes to NAFTA.

We're encouraged the U.S. and Mexico are apparently making progress on auto and auto parts negotiations, as has been reported by multiple news agencies. These issues have been key sticking points.

It's also a positive sign that relations between President Trump and Mexico President-elect Andrés Manuel López Obrador are off to an amicable start.

It's unclear whether the U.S. prefers bilateral trade agreements with Canada and Mexico or if it's committed to the traditional three-country NAFTA framework.

But while López Obrador is broadly supportive of improving NAFTA, RBC Capital Markets notes that some of his goals and strategies differ from the current Nieto administration and that could take time to sort out. López Obrador doesn't take office until December 1.

At this stage it's also unclear whether the U.S. prefers bilateral trade agreements with Canada and Mexico or if it's committed to the traditional three-country NAFTA framework.

Regardless of the structure, there are a number of other thorny issues to sort out between the U.S., Mexico, and Canada aside from autos.

It would be difficult for a complete NAFTA reboot to take place this year, according to RBC Capital Markets' currency strategists, unless the U.S. abandons some of its key demands. They doubt this will occur in coming months. Therefore, NAFTA uncertainty could linger into next year.

RBC Global Asset Management's Chief Economist Eric Lascelles believes there is a 50% likelihood a new NAFTA deal will be struck at some point, a 25% likelihood the trade agreement will be terminated, and a 25% chance the current framework will stay in place.

The longer trade disputes simmer, the greater likelihood they will become a headwind for the economy.

Length matters

A key risk that is often missed in the wider trade debate is duration—the length of time tariffs and trade uncertainties remain in place.

Even if the trade disputes never reach a boiling point or a full-on global trade war, the longer they simmer, the greater likelihood they will become a headwind for the global and U.S. economies.

This can manifest in a variety of ways. At the most basic level, the longer tariffs linger, the more likely they will try business executives' patience.

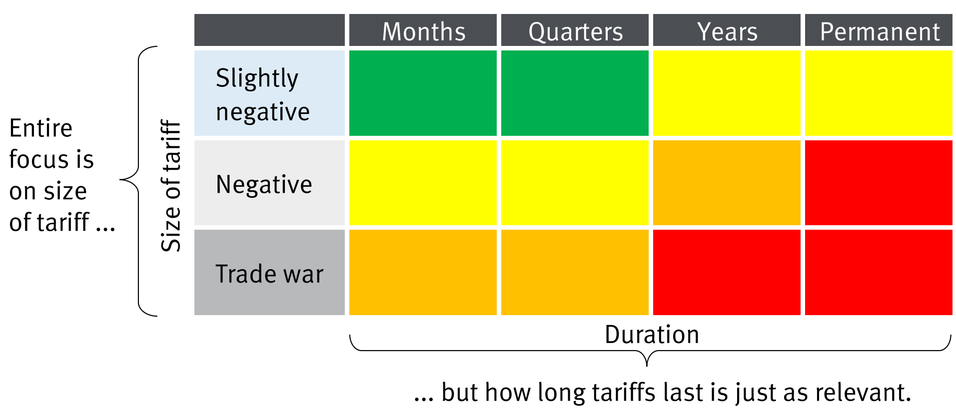
U.S. CEO confidence has pulled back slightly as trade challenges have mounted, but remains elevated. We believe it will retreat further if additional tariffs are implemented. And if corporate sentiment sours, capital spending decisions could be postponed or curtailed.

While long-duration trade disputes could put U.S. economic momentum moderately at risk, they could potentially impact trading partners more. We are already seeing anecdotal evidence that mid-size Canadian firms are becoming hesitant to spend, for example.

The heat map illustrates that relatively small tariffs that last for just months or quarters can be absorbed, as shown with the green boxes. But tariffs that last for years or are permanent, especially those that are larger in size, are more problematic, as shown by the orange and red boxes.

A second dimension to tariff math: Duration

Heat map of cumulative tariff pain



Source - RBC Global Asset Management

How this could end

We don't think the tariff risks have to become acute before meaningful trade deals can take place. Corporate pressure should go a long way toward bringing an end to the trade disputes.

A non-trivial share of major trade relationships—whether between the U.S. and China, the U.S. and the EU, or NAFTA members—is business-to-business and involves complex global supply chains with interdependencies that are often misunderstood or underappreciated by government officials. Some tariffs could tie global supply chains in knots. We don't doubt businesses of all sizes in all countries involved will continue to warn governments about this, which could encourage positive movement toward eventual deals.

Corporate lobbying has already changed the trajectory. We believe the U.S. and German auto industries played a major role in the tariff ceasefire that transpired between the U.S. and EU.

Furthermore, multiple challenges have already been filed against U.S. tariffs in the World Trade Organization (WTO) by major trading partners. Forthcoming rulings by the body or efforts to reform trade rules within the WTO by member countries could create pathways toward resolutions despite the institution's imperfections.

Navigating the trade winds

Some of the hot trade rhetoric and tariff moves seem like they are already priced into equity markets. After all, countries have been grappling with trade challenges for months, and markets are forward looking.

But we're cognizant that if stalemates between trading partners persist or tit-for-tat tariffs mount, the U.S. and other markets would be vulnerable to additional headwinds and volatility, at the least, and downside in more acute instances.

As long as trade rhetoric and tariffs don't put economic and earnings growth seriously at risk, equity markets should be able to navigate through this period.

The renewed U.S. sanctions on Iran also complicate matters, as President Trump wrote in a tweet, "Anyone doing business with Iran will NOT be doing business with the United States."

When there are uncertainties like these, which entail scenarios that could produce wide outcomes, we stay focused on the U.S. and global economies.

As long as trade rhetoric and tariffs don't put economic and earnings growth seriously at risk, equity markets should be able to navigate through this period. So far, the trade actions have not dampened conditions in the U.S., nor have they impacted other countries much, if at all.

While the dispute between the U.S. and China could get worse before it gets better and NAFTA may take more time to reboot, our economists believe the collective tariff tiffs should be manageable for major economies and could ultimately result in lower trade barriers overall. Getting to that point, however, may involve more fireworks.

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. Equities, RBC Capital Markets, LLC

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

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

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

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

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

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

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

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

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

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

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

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

Required disclosures

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

Important Disclosures

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

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

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

References to a Recommended List in the recommendation history chart may include one or more recommended lists or model portfolios maintained by RBC Wealth Management or one of its affiliates. RBC Wealth Management recommended lists include the Guided Portfolio: Prime Income (RL 6), the Guided Portfolio: Dividend Growth (RL 8), the Guided Portfolio: ADR (RL 10), the Guided Portfolio: All Cap Growth (RL 12), and former lists called the Guided Portfolio: Large Cap (RL 7), the Guided Portfolio: Midcap 111 (RL 9), and the Guided Portfolio: Global Equity (U.S.) (RL 11). RBC Capital Markets recommended lists include the Strategy Focus List and the Fundamental Equity Weightings (FEW) portfolios. The abbreviation 'RL On' means the date a security was placed on a Recommended List. The abbreviation 'RL Off' means the date a security was removed from a Recommended List.

Distribution of Ratings
For the purpose of ratings distributions, regulatory rules require member firms to assign ratings to one of three rating categories - Buy, Hold/Neutral, or Sell - regardless of a firm's own rating categories. Although RBC Capital Markets, LLC ratings of Top Pick/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.

Distribution of Ratings - RBC Capital Markets, LLC Equity Research
As of June 30, 2018

			Investment Banking Services Provided During Past 12 Months	
Rating	Count	Percent	Count	Percent
Buy [Top Pick & Outperform]	854	53.61	262	30.68
Hold [Sector Perform]	665	41.75	142	21.35
Sell [Underperform]	74	4.65	6	8.11

Explanation of RBC Capital Markets, LLC Equity Rating System
An analyst's "sector" is the universe of companies for which the analyst provides research coverage. Accordingly, the rating assigned to a particular stock represents solely the analyst's view of how that stock will perform over the next 12 months relative to the analyst's sector average.

Ratings: Top Pick (TP): Represents analyst's best idea in the sector; expected to provide significant absolute total return over 12 months with a favorable risk-reward ratio. **Outperform (O):** Expected to materially outperform sector average over 12 months. **Sector Perform (SP):** Returns expected to be in line with sector average over 12 months. **Underperform (U):** Returns expected to be materially below sector average over 12 months. **Restricted (R)**: RBC policy precludes certain types of communications, including an investment recommendation, when RBC is acting as an advisor in certain merger or other strategic transactions and in certain other circumstances. **Not Rated (NR)**: The rating, price targets and estimates have been removed due to applicable legal, regulatory or policy constraints which may include when RBC Capital Markets is acting in an advisory capacity involving the company.

Risk Rating: The **Speculative** risk rating reflects a security's lower level of financial or operating predictability, illiquid share trading volumes, high balance sheet leverage, or limited operating history that result in a higher expectation of financial and/or stock price volatility.

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

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

Other Disclosures

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

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

Conflicts Disclosure: RBC Wealth Management is registered with the Securities and Exchange Commission as a broker/dealer and an investment adviser, offering both brokerage and investment advisory services. RBC Wealth Management's Policy for Managing Conflicts of Interest in Relation to Investment Research is available from us on our Web site at https://www.rbccm.com/GLDisclosure/PublicWeb/DisclosureLookup.aspx?EntityID=2. Conflicts of interests related to our investment advisory business can be found in Part II of the Firm's Form ADV or the Investment Advisor Group Disclosure Document. Copies of any of these documents are available upon request through your Financial Advisor. We reserve the right to amend or supplement this policy, Part II of the ADV, or Disclosure Document at any time.

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

Third-party disclaimers

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

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

Disclaimer

The information contained in this report has been compiled by RBC Wealth Management, a division of RBC Capital Markets, LLC, from sources believed to be reliable, but no representation or warranty, express or implied, is made by Royal Bank of Canada, RBC Wealth Management, its affiliates or any other person as to its accuracy, completeness or correctness. All opinions and estimates contained in this report constitute RBC Wealth Management's judgment as of the date of this report, are subject to change without notice and are provided in good faith but without legal responsibility. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Every province in Canada, state in the U.S., and most countries throughout the world have their own laws regulating the types of securities and other investment products which may be offered to their residents, as well as the process for doing so. As a result, the securities discussed in this report may not be eligible for sale in some jurisdictions. This report is not, and under no circumstances should be construed as, a solicitation to act as securities broker or dealer in any jurisdiction by any person or company that is not legally permitted to carry on the business of a securities broker or dealer in that jurisdiction. Nothing in this report constitutes legal, accounting or tax advice or individually tailored investment advice. This material is prepared for general circulation to clients, including clients who are affiliates of Royal Bank of Canada, and does not have regard to the particular circumstances or needs of any specific person who may read it. The investments or services contained in this report may not be suitable for you and it is recommended that you consult an independent investment advisor if you are in doubt about the suitability of such investments or services. To the full extent permitted by law neither Royal Bank of Canada nor any of its affiliates, nor any other person, accepts any liability whatsoever for any direct or consequential loss arising from any use of this report or the information contained herein. No matter contained in this document may be reproduced or copied by any means without the prior consent of Royal Bank of Canada. In the U.S., RBC Wealth Management operates as a division of RBC Capital Markets, LLC. In Canada, RBC Wealth Management includes, without limitation, RBC Dominion Securities Inc., which is a foreign affiliate of RBC Capital Markets, LLC. This report has been prepared by RBC Capital Markets, LLC. Additional information is available upon request.

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

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

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

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

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