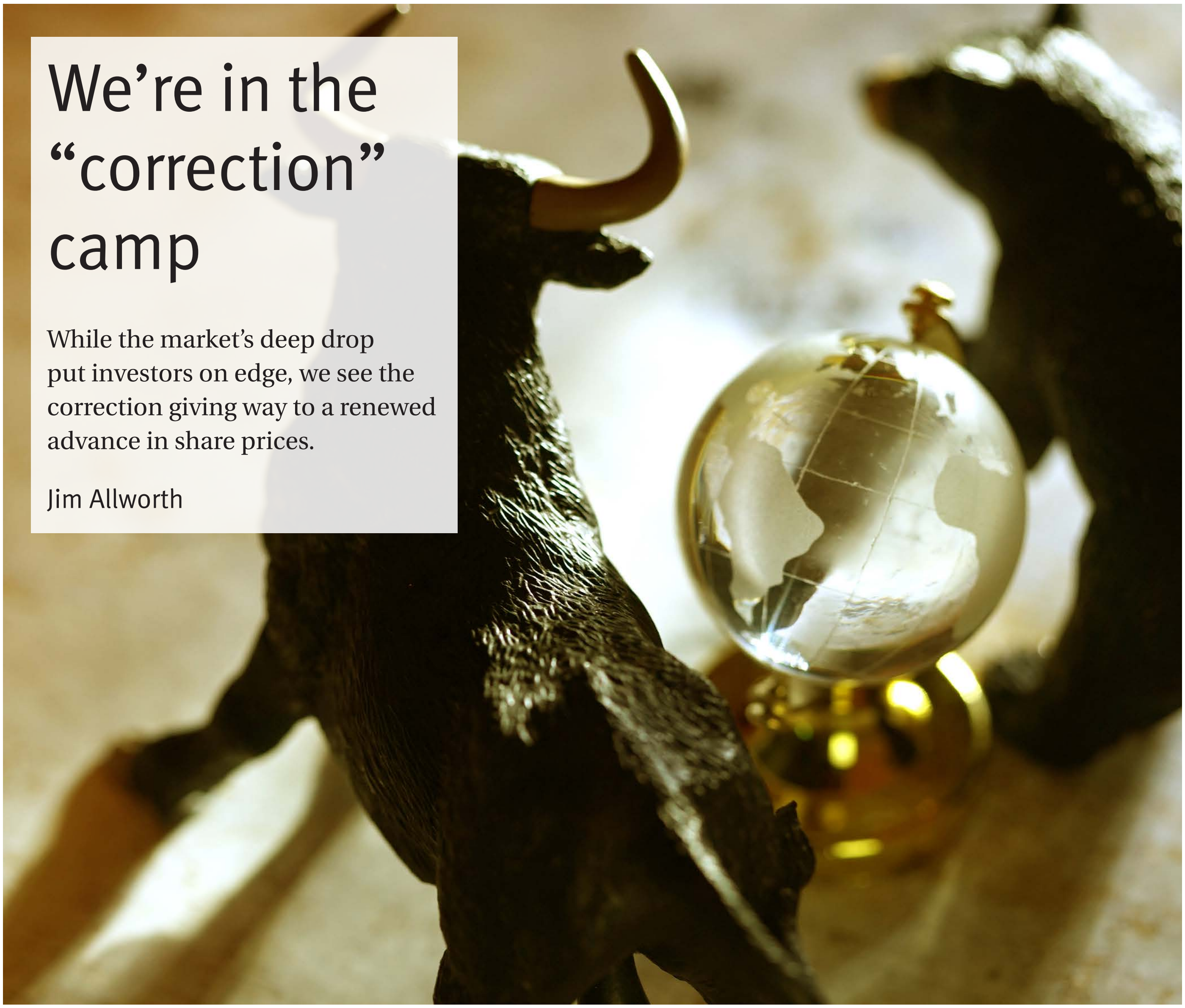
January 2019

RBC WEALTH MANAGEMENT

Global Insight

Focus Article



We're in the "correction" camp

While the market's deep drop put investors on edge, we see the correction giving way to a renewed advance in share prices.

Jim Allworth

For important and required non-U.S. analyst disclosures, see page 7

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

RBC Wealth Management

Focus article

We're in the "correction" camp

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

While the market's deep drop put investors on edge, we see the correction giving way to a renewed advance in share prices. Several metrics argue this cycle has some life in it yet. We offer some thoughts on how to prepare portfolios for the challenges likely to come with an aging, slowing economic expansion.

Equity markets gave investors a rough ride from a late September peak all the way to a Christmas Eve capitulation. There has been something of a revival since then, but opinions are divided as to whether this will prove to be anything more than a brief respite from a downturn/bear market that will reassert itself within a few weeks or months. We are in the camp that holds this has been a correction that will give way to a renewed advance in share prices.

At the very least, the decline has dramatically improved the "internals" of the market. Gone is the complacency that prevailed throughout the summer when a wide majority of investors and forecasters saw no end in sight for the bullish advance in share prices. That persistent optimism gave way to confusion, worry, and several days/weeks of outright fear. By some measures "bears" came to outnumber "bulls" for the first time in years.

Valuations—price-to-earnings (P/E) ratios—also took a big hit but, in the process, became much more attractive. At the September peak the S&P 500 was flirting with a rich 19x earnings. By the December low it was trading at 14.5x. Historically for the S&P 14x–16x trailing earnings has been something of a sweet spot—the market has risen a high percentage of the time in the following 12 months, typically delivering double-digit returns in the process. P/Es fell to even lower, more compelling levels in Canada, the U.K., Europe, and Japan.

Bears are focused on monetary policy and the yield curve

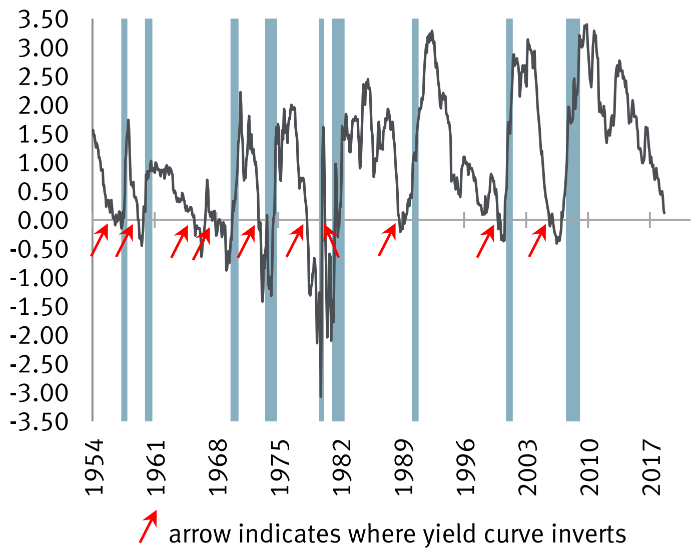
There are still plenty of bears out there. They point to a slowing global manufacturing economy—Purchasing Managers' Indexes (activity indexes) are off their (elevated) highs in Europe and North America while China's manufacturing sector has slipped back into contraction as tariffs bite. They worry the Fed has already gone too far in raising rates, making a U.S. recession inevitable which, they contend, the equity market has already begun to discount.

A great deal of attention has been given to the flattening of the yield curve—i.e., the narrowing of the spread between longer-term bond yields and short-term interest rates. If the curve were to invert, with short-term interest rates moving above the 10-year Treasury yield, then the historical record would argue that a recession is on the way with an expected start date about a year out. Since U.S. recessions have been associated with virtually every bear market, so the bearish case goes, a bear market decline would also be on the way and has probably already begun.

We're in the "correction" camp

The yield curve

Yield differential between the U.S. 10-year Treasury Note and the 1-year Note



Close to inversion but not there yet.

Note: Blue-shaded areas indicate recessions
Source - RBC Wealth Management, FRED Economic Data St. Louis Fed; data through 1/8/19

We are not in that camp. We would point out that the yield curve has not yet inverted (see chart) and it is not a forgone conclusion that it will in the near future. There have been a few near misses in the past and, for the record, there was one outright inversion in the mid-1960s that produced an economic slowdown but no recession. In that case the stock market endured a painful correction but no bear market.

We are not counting on a bullish exception from history to repeat itself. And we are concerned about how close to inversion the gap between the 1-year rate and the 10-year rate has come. Concerned enough to switch our rating of the yield curve from "positive"—i.e., supportive of the idea the U.S. economy could go on expanding for another year or more—to "neutral" (see table).

We note that it wasn't the Fed hiking rates by 25 basis points (bps) in December that accounted for most of the recent narrowing between short- and long-term rates;

RBC Wealth Management U.S. economic indicator scorecard

Indicator	Status		
Yield Curve (12-month to 10-year)	–	✓	–
Unemployment Claims	✓	–	–
Unemployment Rate	✓	–	–
Conference Board Leading Index	✓	–	–
ISM New Orders Minus Inventories	✓	–	–
Fed Funds vs. Nominal GDP Growth	✓	–	–
	Expansion	Neutral	Recessionary

Slight slippage with yield curve now showing caution. Others still signaling expansion.

Source - RBC Wealth Management, Bloomberg, FRED Economic Data St. Louis Fed rather, it was the plunge in the 10-year Treasury yield from 3.22% to 2.56% between early November and year-end. This was mostly the result of investors running for cover into the "safe haven" of Treasuries as the debate raged about the correctness of Fed policy and the stock market went into free fall. As those fears have begun to subside, the 10-year yield has moved back up by 17 bps so far. We believe there may be room for the 10-year yield to move up further from here, moving the yield curve further away from the inversion that seemed so imminent just a few days ago.

Fed ready to be patient

It helps that short-term interest rates appear to be increasingly anchored by a Fed that has recently gone out of its way to assure financial markets that it has not put policy on "autopilot" and that slower economic growth and tame inflation might forestall some of the rate increases pencilled in for this year and next. Futures markets have priced in no hikes at all for 2019.

The other component of credit conditions is banks' willingness to make loans. The most recent Senior Loan Officers' Survey from the Fed indicates that banks on average continue to lower standards for corporate loans and indeed for most types of loans. The same survey indicates reduced corporate demand for credit. Companies are generating more cash internally or are able to meet their credit needs elsewhere. Of the small and medium-sized businesses surveyed by the National Federation of Independent Business, only a very low 4% say they can't get the credit they need and a high 50% say they have no need for credit.

Expansion has further to run, so does the market

Of course, any reprieve may be temporary. So it's worth reminding ourselves that an inversion of the yield curve usually precedes the start of an ensuing recession by 11–14 months and typically precedes the peak of the stock market by 3–6 months. Our two other long-leading indicators—weekly unemployment claims and the Conference Board's Leading Index both suggest to us that the U.S. economy will go on expanding for at least another 9–12 months and conceivably longer.

Our own forecast has U.S. GDP growing at a more subdued 2.5% in 2020, arriving in the form of most quarters printing at a 2.0%–2.3% rate. If, in fact, the Fed is finished as the futures market believes, then it's not unreasonable to look for the economy to go on growing into and perhaps through 2020.

If the U.S. economy goes on growing, so too, in all likelihood, will corporate profits and the value of businesses (i.e., share prices).

If the U.S. economy goes on growing, so too, in all likelihood, will corporate profits and the value of businesses (i.e., share prices), in our view. While we can't rule out a retest of the recent lows, we also can't rule out the prospect for the market to move back up toward or even above its September all-time highs.

No breadth breakdown in sight

There is an additional market internal measure that argues for this more bullish outcome. Market breadth—what proportion of the stocks which make up the market is moving in the same direction as the broad averages—is captured in the so-called advance-decline (A/D) line: an index computed by tracking the number of stocks that go up (advance) on a given day minus the number of issues that decline. This index usually moves "in gear" with the broad averages—peaking when they peak and bottoming when they bottom. And that is what the A/D line has done in this latest instance—it peaked at a new high when the S&P 500 did the same in late September and bottomed with the index in late December.

However, looking back over many decades reveals an important exception to this rule. In the run-up to the final stock market peak before the onset of a bear market, the A/D line typically gives up the ghost several months, or even quarters, before the market does. In other words, the market, measured by a broad average like the S&P 500, goes on making new highs but fewer and fewer stocks are doing the heavy lifting. And by the time the S&P is setting its final high of the bull market, a significant number of stocks are already in well-established downtrends.

The good news is that no such negative divergence between the performance of the broad averages and the A/D line has yet appeared. In fact, the A/D line performed much better in the latest market downturn—down about 12% versus the S&P 500's nearly 20% decline.

Higher share prices likely ahead …

We are persuaded that a durable advance in share prices will ultimately unfold due to a number of factors present today:

- The economic expansion looks to be intact, driven by growing employment, wages, and profitability
- Our forecast of positive but unremarkable GDP growth and tame inflation is likely to keep the Fed and all other central banks from overtly tightening credit
- Shares are trading at valuations that have usually delivered positive 12-month forward returns
- Measures of market pessimism have recently reached levels consistent with correction lows

This is a time to let established equity positions continue to work for the portfolio, hopefully by way of rising dividend payments and internal compounding of shareholders' equity.

… but it's not a time to pile in

We are comfortable having a full allocation (i.e., Market Weight) committed to equities in a balanced portfolio. But we are not persuaded this is a time to be piling in. Rather, it is time to let established equity positions continue to work for the portfolio, hopefully by way of rising dividend payments and internal compounding of shareholders' equity.

In this late-cycle environment, faced with the prospect of positive but slowing growth, the price paid for current earnings and future growth matters. What appears to us to be very good value today may hold much less promise were we six months down the road with an index that was say 12%–15% higher.

We expect the coming 12 months will be most profitably spent preparing an equity portfolio for the future challenges likely to come with an aging, slowing economic expansion that at some point could slip into recession. Here are the items we think should be on the agenda:

- Favour value over growth
- Favour large caps over small caps
- Focus on (growing) dividends
- Reduce exposure to companies highly leveraged to GDP growth
- Focus on relative strength versus the market and sector peers
- Have a plan for playing defense and think in advance of how to implement it

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.; 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 December 31, 2018

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

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

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

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

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

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

Other Disclosures

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

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

Conflicts Disclosure: RBC Wealth Management is registered with the Securities and Exchange Commission as a broker/dealer and an investment adviser, offering both brokerage and investment advisory services. RBC Wealth Management's Policy for Managing Conflicts of Interest in Relation to Investment Research is available from us on our 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 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 RBC Advisory Programs Disclosure Document at any time.

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

Third-party disclaimers

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

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

Disclaimer

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

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

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

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

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

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

© 2019 RBC Capital Markets, LLC - Member NYSE/FINRA/SIPC
© 2019 RBC Dominion Securities Inc. - Member Canadian Investor Protection Fund
© 2019 RBC Europe Limited
© 2019 Royal Bank of Canada
All rights reserved
RBC1524