

Global Insight

Weekly



A closer look

The Fed aims to keep the party alive

Tom Garretson, CFA – Minneapolis

Federal Reserve Chair Jay Powell appears to have done his best impression of Jay Gatsby, as the Fed’s focus seems to have shifted from its two official mandates of steady prices and full employment, to simply keeping the good times rolling.

The Great Gatsby, a meditation on the end of an era in American history following a decade of unprecedented prosperity and excess, may capture the state of mind of Fed officials entering the March 20 meeting of the policymaking Federal Open Market Committee (FOMC).

As fears have grown in recent months that the current 10-year economic expansion might be at risk amid rising recession worries as we near the end of this decade, Fed Chair Powell stated at the opening of his prepared remarks: “My colleagues and I have one overarching goal: to sustain the economic expansion with a strong job market and stable prices, for the benefit of the American people.”

And the Fed took significant steps in the hope of achieving that goal. The key development is that Fed officials now expect no further rate hikes in 2019, down from the two it had forecasted at the December 2018 meeting. Officials still see one more hike in 2020 to get policy rates to 2.75%, which officials continue to view as the “neutral” policy level—or the level at which interest rates are neither boosting economic growth nor restricting it. However, we believe the current rate hike cycle is effectively over and that the Fed will now fine-tune policy as needed, which could include both rate hikes and rate cuts.

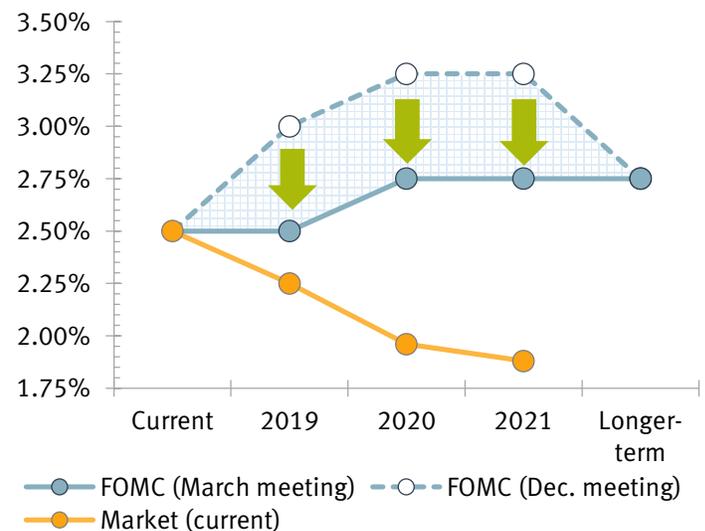
“Can’t repeat the past? Why of course you can!”

So how should we think about the Fed’s outlook now? We have often looked to the 1990s as a sort of guidepost to how the Fed might approach policy this cycle. It was a time of steady growth and stable inflation and one of the longest expansions on record.

The Fed raised rates relatively quickly in 1994, the equivalent of 12 hikes of 25 basis points before stating that it had largely

The Fed sharply lowered its rate hike forecast, but markets are still pricing in rate cuts

Fed now sees just one more rate hike in 2020



Source - RBC Wealth Management, Bloomberg, Federal Open Market Committee Summary of Economic Projections; market data based on overnight indexed swap rates

Market pulse

- 3 Why we’re banking on the banks
- 3 Canada’s budget chock-full of voter-pleasing spending
- 4 Brexit deal coming down to the wire
- 4 U.S. will keep China tariffs as insurance

Click [here](#) for authors’ contact information.

Priced (in USD) as of 3/21/19 market close, EST (unless otherwise stated).

For important disclosures and required non-U.S. analyst disclosures, see [page 6](#)



Wealth Management

achieved its objectives. From there it adjusted policy rates both up and down, before again raising rates at a sustained pace at the end of the decade as the economy began to overheat.

So that's likely how the Fed will approach policy over the coming years in an effort to sustain the current economic expansion. While the data will dictate whether the next move in rates will be higher or lower, the market is increasingly pricing higher chances of the next move being a rate cut.

Prior to the March 20 meeting, markets were pricing about a 30% chance of a rate cut within one year; after the meeting those chances spiked to nearly 50%.

“So we beat on, boats against the current ...”

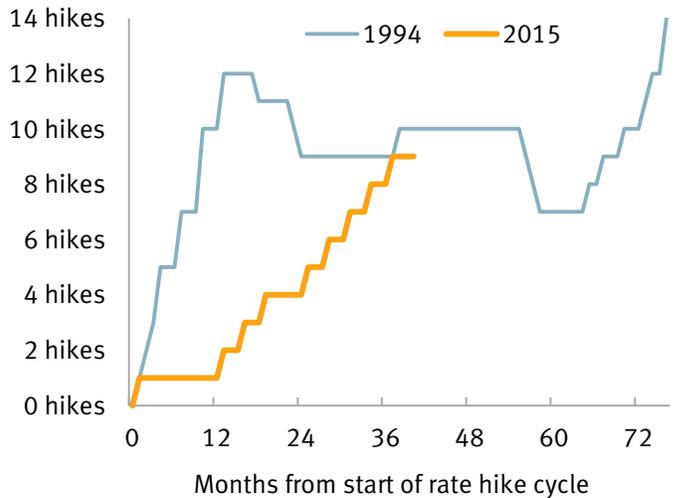
To be sure, the Fed is just one piece of the puzzle in an economic expansion. And while the Fed looks set to do what it can to row into currents in the face of the inevitability of the next recession, we are not yet ready to dismiss rising recession risks. Even after the Fed slashed its rate hike forecasts, yield curves continue to flatten and are on the edge of inversion.

The benchmark yield curve, the spread between 3-month Treasury bills and 10-year Treasury yields, collapsed to just 0.04% in the aftermath of the announcement, and is down sharply from over 1% just six months ago. Based on the New York Fed's yield curve model, that level of flatness puts the chances of a recession within one year at nearly 30%. On top of that, economic surprise indexes remain negative as incoming data has been mixed. And as the bottom chart shows, economic growth is likely to hit a soft patch to start 2019, with tracking estimates below 2%.

The Fed can only do so much, but we believe the steps taken earlier in the week are moves in the right direction to keep the economic party going.

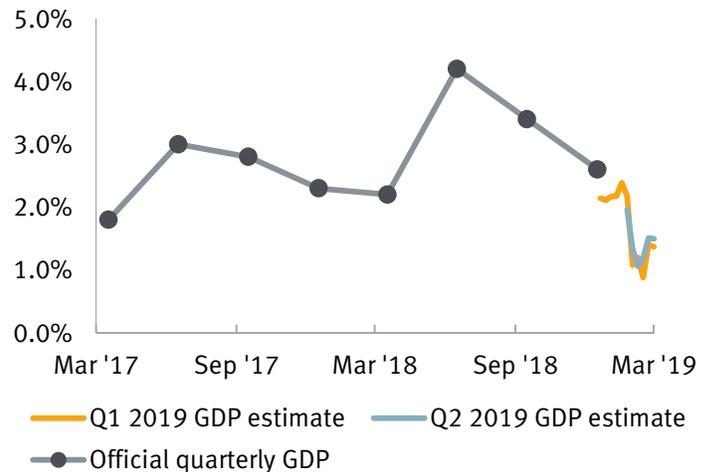
The '90s playbook?

Look for the Fed to fine-tune policy from here



Source - RBC Wealth Management, Bloomberg, Federal Reserve

Growth estimates for 2019 are fading, supporting the Fed's dovish turn



Source - RBC Wealth Management, Bloomberg, estimates from the Federal Reserve Bank of New York, *Nowcasting Report*

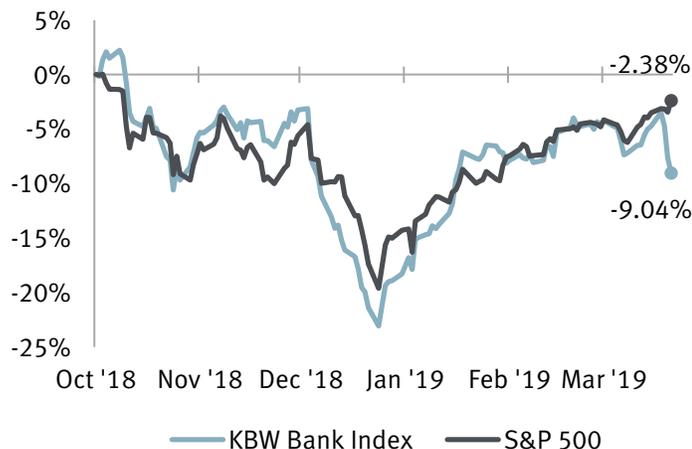


United States

Bill Kuehn, CFA – Minneapolis

- **Corporate bonds have had a hot start to 2019**, with investment-grade (IG) bonds up 3.90% YTD, and high-yield (HY) up 6.81% YTD. **However, an increase in the supply of new debt is taking steam out of the rally.** IG credit spreads, which tightened 32 basis points (bps) in the first two months of the year despite a deluge of supply, narrowed just 2 bps the week of March 11 as approximately \$27B in new bonds were issued in the primary market.
- **We are shifting to a modestly wider outlook on credit spreads** following the rally that has pushed IG spreads to just 120 bps over Treasuries, and HY to 386 bps over—both near the tightest levels of this cycle. **We don't expect credit spreads to move markedly wider with the Fed on hold;** but in the later stages of this cycle, we expect corporate bond buyers to demand higher yield compensation over Treasuries for credit risks. We recommend investors take advantage of the rally in HY and swap up into higher-quality credit.
- Despite the run in equities, **we continue to recommend an Overweight to U.S. bank stocks in portfolios.** Bank stocks have not participated in the rally to the same extent as other sectors, underperforming the S&P 500 by 6.66% since October but opening up an attractive entry point, in our view. We believe valuations remain attractive, both on an absolute basis and relative to the market. The KBW Bank Index currently trades at a 10.55x forward price-to-earnings multiple versus the S&P 500 at 17.15x.

Bank stocks have underperformed the S&P 500 by 6.66% since October



Source - RBC Wealth Management, Bloomberg; data through 3/21/19

- **Deregulation should also be a tailwind, in our view**, now that banks with assets between \$50B and \$250B will no longer have to participate in the annual stress test or be subject to the associated capital use restrictions. In fact, RBC Capital Markets, LLC **banking analyst Gerard Cassidy expects most of the newly exempt banks to post combined dividends and buybacks in excess of earnings in 2019**, as they move toward an ultimate objective of a 40% dividend payout ratio.



Canada

Diana Di Luca – Toronto

- Following the Bank of Canada's (BoC) rate decision on March 6 and given the recent string of softer data in Canada, **RBC Economic Research has pushed its forecast for BoC rate hikes out by one quarter.** RBC Economic Research now expects **one hike in Q4 2019 and another in Q1 2020.** This would take the overnight rate to 2.25%. If, on the other hand, the bond market is correct, we are closer to a cut than a hike from the BoC, suggesting a more material slowdown in the Canadian economy than many are forecasting. With no rate hikes priced into the market and a flat yield curve, we maintain a shorter duration bias. **Guaranteed investment certificates look increasingly compelling versus bonds**, but discounted bonds remain effective.
- On March 19, the **Canadian government announced CA\$21B of new spending** over the next five fiscal years across a range of **measures aimed at pleasing voters.** The measures include, but are not limited to, credits for training and education; a first-time home buyers plan; advanced reconciliation with indigenous peoples; creation of a national drug agency to negotiate drug prices; enhancements to guaranteed income supplements for seniors; and a goal to ensure all Canadians have access to high-speed internet. The government is **expected to post a CA\$14.9B deficit for the fiscal year 2018-19**, effectively in line with where the government projected the shortfall to be back in the fall.
- **The government also expects more fiscal headroom for years two through five of its forecasts** compared to its projections in the fall of 2018. There are about CA\$20B of annual shortfalls forecast for the next two years after which the deficits are slowly reduced to approximately CA\$10B in the fifth year. With the government's projections for nominal GDP over the next five years, this implies a ratio of federal debt-to-GDP of just above 30% over the next couple of years, steadily decreasing to 28.6% by the fifth year. As RBC Economic Research notes,

however, the government's projection of nominal GDP growth of between 3.5% and 4.0% over the next five years appears lofty. If the government is proven to have been too optimistic with its forecasts, the debt-to-GDP ratio, which it places more weight on than the outright level of debt, runs the risk of not looking quite as attractive.

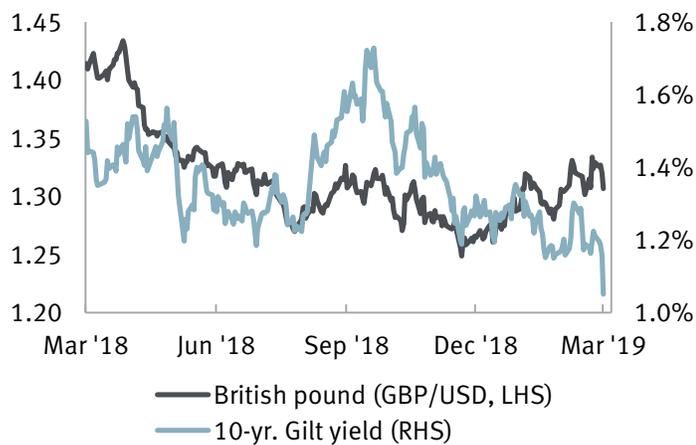


Europe

Frédérique Carrier & Thomas McGarrity, CFA – London

- Data released by the Office for National Statistics showed the **U.K. labour market was shrugging off any Brexit uncertainty**. Despite other recent data that pointed to a waning of hiring intentions, the economy added 222,000 jobs in the three months to the end of January, pushing the unemployment rate down to 3.9%, a 44-year low. As a result of the tight labour market, wage growth remained firm at 3.4% y/y in the same period.
- Under normal circumstances, such data might have led to a strengthening of the currency and higher Gilt yields. In fact, **Gilt yields fell** to 1.084% while **the pound retreated** 1.5% versus the U.S. dollar due to political uncertainty.
- **With just over a week before the March 29 deadline, there is still little visibility as to how or whether the U.K. would leave the EU.** Prime Minister Theresa May has requested a short extension until June 30 to Article 50 (the legal process for Britain to leave the EU). She hopes her Withdrawal Agreement will eventually pass in the House of Commons, having been rejected by 230 votes on January 15 and then by 140 votes on March 12. May's strategy is to try and entice more Members of Parliament (MPs) to vote for this deal in order to avoid alternative scenarios.

Both the pound and 10-year Gilt yield fell after labour report due to political uncertainty



Source - RBC Wealth Management, Bloomberg; data through 3/21/19

For ardent Brexiteers, these are the possibility of a long extension or a softer Brexit. For Europhile MPs, it means the possibility of an accidental hard cliff-edge Brexit.

- **A statement** by European Council President Donald Tusk and European Commission President Jean-Claude Juncker **regarding the granting of an extension is expected** as we go to press.
- Meanwhile, the **Bank of England** (BoE) kept the interest rate at 0.75% and will continue to take its cue from Brexit developments—**postponing a potential rate hike until uncertainty dissipates**. An eventual long extension to Article 50 would likely be seen by the market as an opportunity for the BoE to resume its tightening cycle.



Asia Pacific

Jay Roberts, CFA – Hong Kong

- **Asian equity markets posted a moderately positive response to the Federal Reserve's** interest rate decision and outlook.
- That there was only a modest uptick may have been due in part to the strong bounce in stocks that has already occurred in Q1. It may also have been due to **U.S. President Donald Trump** commenting, on the same day as the Fed announcement, that he **plans to keep existing tariffs on Chinese goods in place even if there is a trade deal**.
- In the clearest guidance yet regarding what has become an increasingly discussed topic—if some kind of trade deal is struck, **what level of tariffs will remain in place, and for how long**—Trump stated: “We’re not talking about removing them, we’re talking about leaving them ... for a substantial period of time because we have to make sure that if we do the deal with China that China lives by the deal.” Of course, this view could change.
- **China's premier, Li Keqiang, again acknowledged that the economy is slowing.** He noted that the solution is to cut taxes and reduce regulation rather than to pump money into the economy. **China recently announced a significant reduction of RMB2T (\$300B) in corporate VAT rates**, particularly for smaller companies.
- Chinese internet giant **Tencent** (700 HK), with businesses spanning gaming to social media, **missed consensus earnings forecasts for Q4**. Net income was RMB14.1B (\$2.11B), below forecast of RMB17.55B (\$2.62B). Revenue rose by 5% y/y to RMB84.9B (\$12.7B) and adjusted earnings per share were RMB2.07. One of the headwinds facing Tencent in 2018 was the government's freeze on the approval of new games.



MARKET SCORECARD

Data as of March 21, 2019

Equities (local currency)	Level	MTD	YTD	1 yr	2 yr
S&P 500	2,854.88	2.5%	13.9%	5.3%	21.8%
Dow Industrials (DJIA)	25,962.51	0.2%	11.3%	5.2%	25.6%
NASDAQ	7,838.96	4.1%	18.1%	6.7%	35.3%
Russell 2000	1,562.41	-0.8%	15.9%	-1.1%	16.0%
S&P/TSX Comp	16,244.59	1.5%	13.4%	3.6%	6.1%
FTSE All-Share	4,020.51	3.4%	9.4%	3.2%	0.2%
STOXX Europe 600	380.69	2.1%	12.7%	1.5%	1.3%
EURO STOXX 50	3,367.40	2.1%	12.2%	-1.0%	-1.8%
Hang Seng	29,071.56	1.5%	12.5%	-7.5%	18.2%
Shanghai Comp	3,101.46	5.5%	24.4%	-5.5%	-4.9%
Nikkei 225	21,608.92	1.0%	8.0%	1.1%	11.1%
India Sensex	38,386.75	7.0%	6.4%	15.8%	30.2%
Singapore Straits Times	3,213.65	0.0%	4.7%	-8.5%	1.7%
Brazil Ibovespa	96,729.08	1.2%	10.1%	13.8%	53.6%
Mexican Bolsa IPC	43,251.19	1.0%	3.9%	-9.0%	-11.0%
Commodities (USD)	Price	MTD	YTD	1 yr	2 yr
Gold (spot \$/oz)	1,309.32	-0.3%	2.1%	-1.7%	5.2%
Silver (spot \$/oz)	15.47	-0.9%	-0.2%	-6.7%	-11.8%
Copper (\$/metric ton)	6,483.50	-1.1%	9.0%	-4.1%	12.8%
Oil (WTI spot/bbl)	59.83	4.6%	31.8%	-8.1%	26.4%
Oil (Brent spot/bbl)	67.70	2.5%	25.8%	-2.5%	32.8%
Natural Gas (\$/mmBtu)	2.82	0.3%	-4.0%	6.9%	-8.8%

Govt bonds (bps chg)	Yield	MTD	YTD	1 yr	2 yr
U.S. 10-Yr Tsy	2.535%	-18.0	-14.9	-34.8	11.8
Canada 10-Yr	1.668%	-27.4	-29.9	-59.0	-3.6
U.K. 10-Yr	1.064%	-23.8	-21.3	-46.3	-18.9
Germany 10-Yr	0.041%	-14.2	-20.1	-55.1	-41.8
Fixed Income (returns)	Yield	MTD	YTD	1 yr	2 yr
U.S. Aggregate	3.05%	1.1%	2.1%	4.5%	5.1%
U.S. Invest Grade Corp	3.76%	1.3%	3.9%	4.7%	6.8%
U.S. High Yield Corp	6.50%	0.5%	6.8%	5.4%	10.4%
Currencies	Rate	MTD	YTD	1 yr	2 yr
U.S. Dollar Index	96.3890	0.2%	0.2%	7.4%	-3.4%
CAD/USD	0.7478	-1.5%	2.0%	-3.5%	-0.2%
USD/CAD	1.3373	1.5%	-1.9%	3.6%	0.2%
EUR/USD	1.1370	0.0%	-0.8%	-7.8%	5.2%
GBP/USD	1.3101	-1.2%	2.7%	-7.4%	5.0%
AUD/USD	0.7110	0.2%	0.9%	-8.4%	-7.6%
USD/JPY	110.8100	-0.5%	1.0%	4.5%	-0.8%
EUR/JPY	125.9900	-0.5%	0.1%	-3.7%	4.3%
EUR/GBP	0.8679	1.2%	-3.5%	-0.5%	0.2%
EUR/CHF	1.1286	-0.6%	0.3%	-3.7%	5.0%
USD/SGD	1.3494	-0.2%	-1.0%	2.8%	-3.6%
USD/CNY	6.6993	0.1%	-2.6%	5.9%	-2.7%
USD/MXN	18.8739	-2.1%	-4.0%	2.4%	-1.2%
USD/BRL	3.8036	1.2%	-1.8%	16.2%	23.2%

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 9:35 pm GMT 3/21/19.

Examples of how to interpret currency data: CAD/USD 0.74 means 1 Canadian dollar will buy 0.74 U.S. dollar. CAD/USD 2.0% return means the Canadian dollar rose 2.0% vs. the U.S. dollar year to date. USD/JPY 110.81 means 1 U.S. dollar will buy 110.81 yen. USD/JPY 1.0% return means the U.S. dollar rose 1.0% vs. the yen year to date.

Authors

Tom Garretson, CFA – Minneapolis, United States

tom.garretson@rbc.com; RBC Capital Markets, LLC

Bill Kuehn, CFA – Minneapolis, United States

william.kuehn@rbc.com; RBC Capital Markets, LLC

Diana Di Luca – Toronto, Canada

diana.diluca@rbc.com; RBC Dominion Securities Inc.

Frédérique Carrier – London, United Kingdom

frederique.carrier@rbc.com; Royal Bank of Canada Investment Management (U.K.) Ltd.

Thomas McGarrity, CFA – London, United Kingdom

thomas.mcgarrity@rbc.com; Royal Bank of Canada Investment Management (U.K.) Ltd.

Jay Roberts, CFA – Hong Kong, China

jay.roberts@rbc.com; RBC Investment Services (Asia) Limited

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: Diana Di Luca, an employee 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 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), and 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.

Rating	Count	Percent	Investment Banking Services Provided During Past 12 Months	
			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 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; and by Royal Bank of Canada Investment Management (U.K.) Limited, an investment management company 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 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. 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.

© 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