July 11, 2019

RBC WEALTH MANAGEMENT

Global Insight

Weekly

A closer look

After the fireworks

Kelly Bogdanova – San Francisco

As the equity market looks ahead to Q2 results and the second half of 2019, we expect lackluster corporate earnings growth, with gusts of short-term volatility possible. But we believe the market can work through the earnings doldrums so long as trade tensions don't boil over and economic trends hold up.

With major U.S. equity indexes at all-time highs, market participants have been hanging on comments from the Federal Reserve and U.S.-China trade negotiators.

Fed Chairman Jerome Powell signaled again that he's open to lowering interest rates, and we anticipate it will happen at the July 30–31 Federal Open Market Committee meeting, with more cuts at subsequent meetings if needed. U.S.-China trade rhetoric has been relatively calm of late, but there are no signs of a breakthrough.

In the near term, we see attention shifting to bread-and-butter issues: Q2 earnings reports and the outlook for subsequent quarters.

Sluggish earnings growth is to be expected, according to consensus forecasts. This is well known by market participants and we believe it largely has been factored into stock prices. It's a key reason—notwithstanding the S&P 500 reaching an all-time high—that the market has traded in a wide, volatile range for many months.

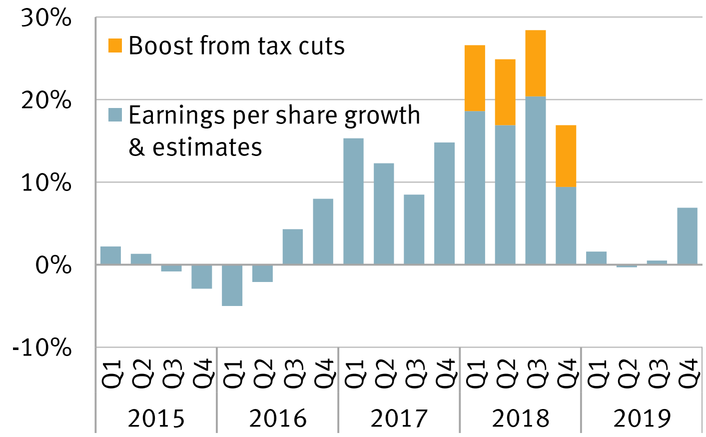
Even so, Q2 earnings results and management teams' comments about the economy, trade/tariff disputes, and outlooks for future quarters could pose some challenges for the market, or provide an excuse for a pullback.

Will the earnings beats go on?

The consensus forecast for Q2 earnings growth recently slipped into negative territory, to a lackluster -0.3% y/y level.

2019 is a consolidation year for earnings growth

S&P 500 earnings per share growth (y/y), actual & consensus estimates*



* Actual earnings growth from Q1 2015 through Q4 2018. Q1 2019 is actual data, but subject to revision. Q2 2019 and onward reflect the consensus estimates. Source - RBC Wealth Management, Refinitiv; data through 7/10/19

Market pulse

3 U.S. small-cap equities appear poised to outperform

3 Bank of Canada sounds a note of caution

4 British pound falls as Brexit uncertainty rises

4 Japan export restrictions could hit South Korea tech giants

Click here for authors' contact information.
Priced (in USD) as of 7/11/19 market close, EST (unless otherwise stated).
For important disclosures and required non-U.S. analyst disclosures, see page 6

Wealth Management

This is down from 1.2% two months ago and 6.5% in January. When all is said and done this reporting season, we think earnings "beats" will lift the Q2 growth rate back into positive territory, perhaps by a couple of percentage points.

However, the proportion of beats may not reach the above-average levels of recent seasons and, more importantly, the *magnitude* of beats (the degree to which they exceed estimates) seems unlikely to match previous quarters, in our view. There could also be more high-profile earnings misses by U.S.-based multinationals given the early reporting trends by multinationals headquartered overseas.

Management teams' guidance about future quarters, and their thoughts about domestic and global economic trends, trade, capital spending, margins, and more will of course be under the microscope.

Some companies will likely update their full-year estimates, but companies often wait until Q3 industry conferences or the Q3 reporting season to do so. Regardless of the timing, we think the consensus forecast for Q4 earnings growth of 6.8% y/y is vulnerable to further cuts.

Even though these developments could create market volatility during the Q2 reporting season, it is unlikely to be enough to break the bull market, in our view. Such events are to be expected when earnings momentum slows, and we think much of this has already been factored into the market.

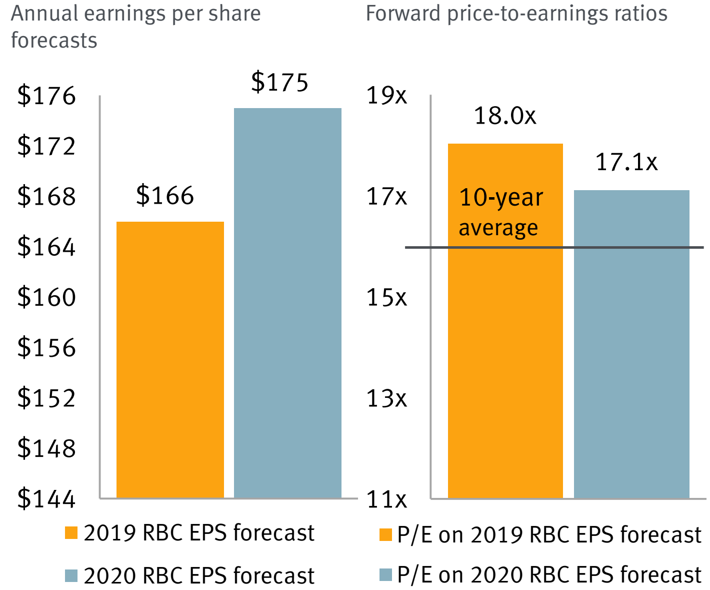
A tough act to follow

The full-year outlook is also unspectacular. After torrid 23% y/y earnings growth in 2018, the consensus forecast calls for just 2.4% y/y growth in 2019, nearly equivalent to RBC Capital Markets' estimate. Consensus revenue estimates have been scaled back to the low single digits, compared to an average of 8% last year.

The main culprits are waning economic momentum combined with trade tensions and uncertainties. U.S. manufacturing data suggest a range of outlooks from weak growth to a modest contraction, while manufacturing in Europe, China, and Japan is contracting. U.S.-based companies' capital spending plans have eased recently and could pull back further given the trade uncertainties not only with China, but also with the EU, Japan, India, and the list goes on. Another bout of global disinflation hasn't helped corporate trends, either.

Arithmetic is also a factor. Low tax rates, which boosted 2018 U.S. earnings by 7–8 percentage points, no longer factor into the year-over-year earnings growth calculation. Furthermore, robust 2018 earnings growth set a high bar that will be difficult to exceed by any meaningful margin, in our view.

S&P 500 valuation is elevated, but not overly expensive



Source - RBC Wealth Management, RBC Capital Markets (RBC forecast); data through 7/10/19

The combination of lower earnings estimates and the market's recent rally has resulted in higher-than-average price-to-earnings ratios of 18.0x and 17.1x for 2019 and 2020, respectively, based on RBC Capital Markets' estimates (see chart above). In our view, these valuations are not overly expensive compared to the 16.0x 10-year average, nor should they constrain stock prices.

The long and winding road

Profits and revenues don't grow in a straight line, even during expansion cycles, so we are not unduly surprised by recent pullbacks in earnings growth estimates. But Q2 earnings season will likely have some rough patches that could create market volatility in the short term.

As long as economic trends don't deteriorate meaningfully and trade tensions don't heat up to the degree that global economic growth is further at risk, we think the market can work through this earnings lull. Accordingly, we continue to recommend a Market Weight or benchmark position in U.S. equities.

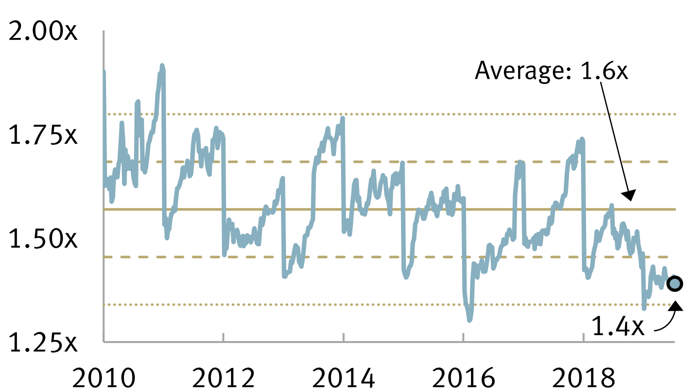
United States

Ben Graham, CFA – Minneapolis

- **U.S. equity markets have rallied during the week**; the S&P 500, Dow Jones Industrial Average, and NASDAQ closed at all-time highs on Wednesday, July 10, or Thursday, July 11, or both. The gains were led by Energy, Real Estate, and Consumer Discretionary while Financials and Industrials were the worst-performing sectors.
- **Small caps are gaining favorability**, in our opinion. We think small-cap **valuations are attractive** at this time, relative to large caps, and that their **lower reliance on overseas revenues** is a net positive. Small-cap stocks have **less exposure to trade conflicts and global growth uncertainty** while also providing greater leverage to potential rate cuts from the Federal Reserve. We remain comfortable with a Market Weight position in U.S. equities and are more constructive on small caps at this time.
- **Further supporting the favorability of small caps** is recent research from RBC Capital Markets, LLC Head of U.S. Equity Strategy Lori Calvasina. She believes that some of the biggest near- and medium-term concerns she sees in large-cap stocks are less onerous for small caps. First, the Russell 2000 is well below its post Financial Crisis valuation peaks, something that cannot be said for the S&P 500. Second, while crowding (when institutional investors tend to move as a herd into sub-asset classes) is a concern for large caps, evidence of this phenomenon is not present in small caps. Third, margin pressures materialized in the Russell 2000 during Q4 2018 and Q1 2019, but Calvasina thinks these should abate in upcoming quarters. Finally, while earnings revisions are shifting lower, small-cap trends have proven to be more durable so far, and negative pre-announcements have been skewed to large caps.

Small-cap equities' attractive relative valuation

Russell 2000 forward P/E ratio relative to the S&P 500



Dashed lines represent standard deviations. Source - RBC Wealth Management, Bloomberg; data through 7/10/19

- **Recent data have shown the U.S. economy is not quite ready to roll over.** June's jobs report showed 224,000 additions, well ahead of consensus expectations at 160,000. This comes on the heels of the fear-inducing 75,000 print for May. Furthermore, June inflation was higher than expected, as the Consumer Price Index (CPI) increased 0.1% m/m and 1.6% y/y. Excluding food and energy costs, the CPI showed a 2.1% y/y increase.

Canada

Christopher Girdler, CFA – Toronto

- **The Bank of Canada (BoC) kept the overnight lending rate unchanged at 1.75%** during the week, but its tone within the prepared statement and monetary policy report was one of real caution. To be fair, the governing council noted that domestic aggregate demand was improving more quickly than it had previously expected, but this was **overshadowed by the ongoing trade war** which is severely clouding the BoC's outlook for real GDP. The trade conflict is causing the BoC enough issues that it mentioned the topic multiple times in the statement and included a special scenario analysis in its monetary policy report which demonstrated that Canada, being a small and open economy, has a lot to lose if the conflict worsens.
- Overall, the BoC **decided to leave the inflation outlook relatively unchanged**, between 1.8% and 2% over the next couple of years, which leaves the BoC in wait-and-see mode for a while. We think the BoC's persistent comments on trade provide it with plenty of cover if it decides to opt for an insurance cut or two in the near future, and the BoC's decision tree seems firmly between nothing or cuts. **The market is now pricing in one rate cut in Canada** by this time next year. While this is less than what was priced in a month ago, the market is clearly grappling between better-than-expected domestic data and the worsening global outlook to determine which will drive yields.
- **Whether the BoC cuts or not may depend on why (and when) the Federal Reserve (Fed) reduces the fed funds range.** We are more inclined to believe that a Fed that cuts in fear of a growth slowdown would be more of a precursor to cuts in Canada than one cutting to maintain easy financial conditions. Only time will tell on the matter, but we think investors sitting on cash can avoid the issue right now by buying Federal agency bonds which mature in 2021/2022 and are priced below par.

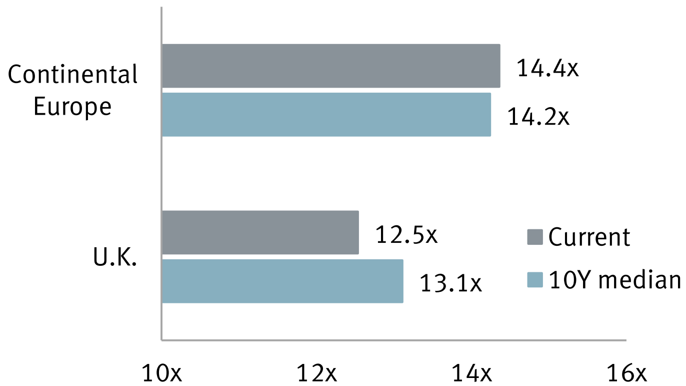
Europe

Thomas McGarrity, CFA & Laura Cooper – London

- **A profit warning from BASF weighed on a number of cyclical subsectors of the European equity market.** The world's largest chemicals company blamed significantly weaker-than-expected global economic growth and industrial production in the first half of 2019, largely due to the trade conflict between the U.S. and China.
- Given the deterioration of economic growth momentum so far this year and dimming prospects for an improvement in the second half of 2019, **we think there's a reasonable chance that a number of cyclically exposed companies will reset guidance this results season**. We note, however, that the valuations attached to "value" stocks appear to show investors are already sceptical about current earnings estimates, with the MSCI Europe Value Index currently trading on a 2019 estimated price-to-earnings ratio under 11x versus a five-year average close to 13x.
- A clear gauge on the health of the U.K. economy remains elusive, with **Brexit uncertainty continuing to distort economic activity**. The U.K. economy bounced back in June after posting a sharp contraction in May, although **much of the recovery reflected a rebound in car manufacturing following Brexit-related plant shutdowns the previous month**.
- **The British pound tumbled to early-2017 lows against the U.S. dollar** as political rhetoric around the U.K. leaving the EU without a deal at the end of October escalated. The expressed willingness of both candidates for Conservative Party leader to keep a no-deal Brexit on the table is keeping uncertainty elevated.

European and U.K. equities appear to be fairly discounting near-term challenges

Next-twelve-month P/E ratios



Source - RBC Wealth Management, Bloomberg; data through 7/10/19

- Gathering clouds on the global economic horizon and rising Brexit uncertainty prompted Bank of England Governor Mark Carney to signal a major shift in monetary policy is likely forthcoming. **RBC Capital Markets now anticipates a 0.25% interest rate cut in November**, contingent on how the Brexit process unfolds in coming months.

Asia Pacific

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

- Twelve days have passed since the meeting between U.S. President Donald Trump and China President Xi Jinping at which a trade truce was announced; however, it remains unclear when the next high-level face-to-face meeting will be held. **Trade officials had a "constructive" phone conversation during the week** but the lack of discussion details left investors guessing. Meanwhile, **disagreements are emerging over what was committed at the G20 leaders' meeting**, in particular regarding large purchases of agricultural commodities and the relaxation of export restrictions on Huawei Technology. We do not expect the truce to lead to a trade agreement any time soon, and we believe this game of poker may continue beyond the 2020 U.S. elections.
- **In Hong Kong, activists plan to host protests in a different district every Sunday.** Chief Executive Carrie Lam came close to admitting defeat by calling a controversial extradition bill "dead." However, her refusal to formally withdraw the legislation has provided a new rallying point for the movement. We think Hong Kong retail business will be negatively affected if protests become a regular event.
- Japan Cabinet Office data showed that **core orders**, a highly volatile data series regarded as an indicator of capital spending in the coming six to nine months, **fell 7.8% m/m in May**. The reading was below economists' expectations and the **biggest drop since September 2018**. This cast doubt on the thesis that solid domestic demand can help offset external pressure on the export-reliant economy.
- **Frictions arose between Japan and South Korea** over compensation demanded by Seoul for South Koreans forced to work for Japanese firms during World War II. Japan said it would tighten curbs on exports of three materials crucial for advanced consumer electronics. We believe these **restrictions could hit South Korean tech giants**, such as Samsung Electronics (005930 KS) and SK Hynix (000660 KS).

MARKET SCORECARD

Data as of July 11, 2019

Equities (local currency)	Level	MTD	YTD	1 yr	2 yr
S&P 500	2,999.91	2.0%	19.7%	8.1%	23.7%
Dow Industrials (DJIA)	27,088.08	1.8%	16.1%	9.7%	26.5%
NASDAQ	8,196.04	2.4%	23.5%	6.2%	32.3%
Russell 2000	1,557.92	-0.6%	15.5%	-7.5%	10.3%
S&P/TSX Comp	16,527.90	0.9%	15.4%	0.7%	9.1%
FTSE All-Share	4,093.50	0.9%	11.4%	-2.0%	2.2%
STOXX Europe 600	386.70	0.5%	14.5%	1.4%	2.0%
EURO STOXX 50	3,496.73	0.7%	16.5%	2.2%	0.9%
Hang Seng	28,431.80	-0.4%	10.0%	0.4%	9.9%
Shanghai Comp	2,917.76	-2.1%	17.0%	5.0%	-8.9%
Nikkei 225	21,643.53	1.7%	8.1%	-1.3%	7.2%
India Sensex	38,823.11	-1.5%	7.6%	7.1%	22.3%
Singapore Straits Times	3,350.45	0.9%	9.2%	3.1%	4.1%
Brazil Ibovespa	105,134.80	4.1%	19.6%	41.3%	64.7%
Mexican Bolsa IPC	42,882.02	-0.6%	3.0%	-12.5%	-15.1%

Commodities (USD)	Price	MTD	YTD	1 yr	2 yr
Gold (spot $/oz)	1,402.62	-0.5%	9.4%	12.9%	15.2%
Silver (spot $/oz)	15.11	-1.4%	-2.5%	-4.4%	-4.6%
Copper ($/metric ton)	5,928.50	-0.9%	-0.3%	-3.3%	1.4%
Oil (WTI spot/bbl)	60.20	3.0%	32.6%	-14.5%	33.7%
Oil (Brent spot/bbl)	66.78	0.3%	24.1%	-9.0%	40.5%
Natural Gas ($/mmBtu)	2.41	4.2%	-18.2%	-15.0%	-21.0%

Govt bonds (bps chg)	Yield	MTD	YTD	1 yr	2 yr
U.S. 10-Yr Tsy	2.140%	13.5	-54.5	-71.0	-22.1
Canada 10-Yr	1.627%	16.1	-34.0	-52.0	-23.0
U.K. 10-Yr	0.836%	0.3	-44.1	-45.8	-43.9
Germany 10-Yr	-0.225%	10.2	-46.7	-59.2	-77.5

Fixed Income (returns)	Yield	MTD	YTD	1 yr	2 yr
U.S. Aggregate	2.55%	-0.2%	5.9%	7.4%	7.4%
U.S. Invest Grade Corp	3.21%	-0.2%	9.6%	9.7%	9.7%
U.S. High Yield Corp	5.86%	0.2%	10.2%	7.4%	10.7%

Currencies	Rate	MTD	YTD	1 yr	2 yr
U.S. Dollar Index	97.0690	1.0%	0.9%	2.5%	1.5%
CAD/USD	0.7652	0.2%	4.4%	1.1%	-1.2%
USD/CAD	1.3069	-0.2%	-4.2%	-1.1%	1.2%
EUR/USD	1.1252	-1.1%	-1.9%	-3.6%	-1.9%
GBP/USD	1.2522	-1.4%	-1.8%	-5.2%	-2.5%
AUD/USD	0.6974	-0.7%	-1.1%	-5.3%	-8.7%
USD/JPY	108.4900	0.6%	-1.1%	-3.1%	-4.8%
EUR/JPY	122.0900	-0.5%	-3.0%	-6.6%	-6.6%
EUR/GBP	0.8986	0.3%	0.0%	1.7%	0.7%
EUR/CHF	1.1144	0.4%	-1.0%	-4.2%	0.8%
USD/SGD	1.3569	0.3%	-0.4%	-0.5%	-1.8%
USD/CNY	6.8702	0.0%	-0.1%	2.8%	1.0%
USD/MXN	19.0737	-0.8%	-2.9%	0.0%	6.5%
USD/BRL	3.7528	-2.5%	-3.1%	-3.2%	15.3%

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 7/11/19.

Examples of how to interpret currency data: CAD/USD 0.76 means 1 Canadian dollar will buy 0.76 U.S. dollar. CAD/USD 4.4% return means the Canadian dollar rose 4.4% vs. the U.S. dollar year to date. USD/JPY 108.49 means 1 U.S. dollar will buy 108.49 yen. USD/JPY -1.1% return means the U.S. dollar fell 1.1% vs. the yen year to date.

Authors

Kelly Bogdanova – San Francisco, United States
kelly.bogdanova@rbc.com; RBC Capital Markets, LLC

Ben Graham, CFA – Minneapolis, United States
benjamin.graham@rbc.com; RBC Capital Markets, LLC

Christopher Girdler, CFA – Toronto, Canada
christopher.girdler@rbc.com; RBC Dominion Securities Inc.

Thomas McGarrity, CFA – London, United Kingdom
thomas.mcgarrity@rbc.com; Royal Bank of Canada Investment Management (U.K.) Ltd.

Laura Cooper – London, United Kingdom
laura.cooper@rbc.com; Royal Bank of Canada Investment Management (U.K.) Ltd.

Jasmine Duan – Hong Kong, China
jasmine.duan@rbc.com; RBC Investment Services (Asia) Limited

Nicholas Gwee, CFA – Singapore
nicholas.gwee@rbc.com; Royal Bank of Canada, Singapore Branch

Disclosures and Disclaimer

Analyst Certification

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

Important Disclosures

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

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

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

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

Distribution of Ratings

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

Explanation of RBC Capital Markets, LLC Equity Rating System

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

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

			Investment Banking Services Provided During Past 12 Months	
Rating	Count	Percent	Count	Percent
Buy [Top Pick & Outperform]	772	53.57	215	27.85
Hold [Sector Perform]	588	40.80	114	19.39
Sell [Underperform]	81	5.62	2	2.47

Ratings:

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

Risk Rating:

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

Valuation and Risks to Rating and Price Target

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

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

Other Disclosures

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

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

Conflicts Disclosure: RBC Wealth Management is registered with the Securities and Exchange Commission as a broker/dealer and an investment adviser, offering both brokerage and investment advisory services. RBC Wealth Management's Policy for Managing Conflicts of Interest in Relation to Investment Research is available from us on our website at https://www.rbccm.com/GLDisclosure/PublicWeb/DisclosureLookup.aspx?EntityID=2. Conflicts of interests related to our investment advisory business can be found in Part 2A Appendix 1 of the Firm's Form ADV or the RBC Advisory Programs Disclosure Document. Copies of any of these documents are available upon request through your Financial Advisor. We reserve the right to amend or supplement this policy, Part 2A Appendix 1 of the Form ADV, or the RBC Advisory Programs Disclosure Document at any time.

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