

Global Insight

Weekly

Trade tantrum?

Frédérique Carrier – London

As if economies and markets didn't already have their hands full, U.S.-China trade tensions have been rekindled. While it's unlikely a new, full-blown trade war will be unleashed, the two rivals are likely to lock horns over the next few months. This additional layer of uncertainty reinforces our cautious stance toward equities.

Among the good news that many economies are starting to reopen or preparing to, President Donald Trump's tough rhetoric toward China about COVID-19 and trade poses additional risks for equity markets. The U.S.-China rivalry, while never gone, had largely fallen off the radar of the corporate sector and investors alike in recent months.

Will it come back in full force like it did during the trade war? We doubt it, though we wouldn't underestimate the possibility of missteps from either side, which could have serious ramifications at a time when the global economy is particularly weak. We reiterate our message to keep some powder dry.

Turning the heat back up

Following a barrage of statements by top U.S. administration officials about China's handling of the initial COVID-19 outbreak (and some retorts from Chinese officials), Trump recently observed that China hasn't lived up to the terms of the January 2020 trade deal with the U.S. This agreement called for a ceasefire in the two-year conflict, and in particular required China to buy \$200 billion worth of American goods. Trump fell short of confirming whether he would use tariffs again.

While his statements captured headlines, his administration has taken several other noteworthy steps recently, such as imposing new export controls on technologies with both military and civilian applications, and new restrictions on the import of foreign parts for U.S. power plants and electricity grids so as to diminish security risks to U.S. infrastructure. These moves have largely flown under the radar due to the national emergency caused by COVID-19.

While these trade tensions may yet be defused, we think the direction of the U.S.-China relationship is likely to be toward deterioration. Since the global financial crisis, as U.S. households reduced debt and China focused on domestic consumption and self-sufficiency, the two economic powers have drifted apart. The process has accelerated due to Chinese wages increasing, which has reduced the country's attractiveness as a source of cheap labor, Trump's trade war, and now the global pandemic whose first hotspot was in the Chinese city of Wuhan.

Main issue

Policy regarding China will likely become a major issue in the U.S. ahead of the November 2020 presidential election. Historically, U.S. elections have hinged around the economy, and likely will again. But there are always unique "wedge issues" that surface in each election, and we think China will be one of them, with both main presidential candidates competing as to who can sound tougher on China.

Market pulse

- 3 The contours of the U.S. economic landscape
- 3 Bank of Canada's next governor is appointed
- 4 A symbolic ruling against ECB policy
- 4 A mixed bag for Chinese consumption

Click [here](#) for authors' contact information. Priced (in USD) as of 5/7/20 market close, ET (unless otherwise stated). **For important disclosures and required non-U.S. analyst disclosures, see [page 6](#).**
Produced: May 7, 2020 16:29ET; Disseminated: May 7, 2020 17:00ET



Wealth
Management

Investment and insurance products offered through RBC Wealth Management are not insured by the FDIC or any other federal government agency, are not deposits or other obligations of, or guaranteed by, a bank or any bank affiliate, and are subject to investment risks, including possible loss of the principal amount invested.

A hard line against China seems to have bipartisan support. A Pew Research Center survey conducted in March 2020 suggests that more than 50 percent of Americans have an unfavorable view of China.

Trump is likely to focus on trade and question China's handling of the COVID-19 virus, while Joe Biden, the presumptive Democratic candidate, will likely focus on other issues where the U.S. perceives China to be committing infractions, such as carbon emissions, cyberattacks, and human rights.

As such, both powers are likely to lock horns over the next few months.

Tariffs in a recession

In an effort to boost his reelection chances, and given the U.S. economy is already suffering due to COVID-19, Trump may try to maximize political advantage over China while minimizing the adverse economic impact on the U.S.

This could come in the guise of sanctions (of which there are already more than 8,000 U.S. sanctions against foreign governments, entities, corporations, and individuals) and/or tariffs.

Imposing tariffs while the domestic economy is growing, as in 2019, is one thing, but to do so when it is contracting is another proposition altogether. Eric Lascelles, RBC Global Asset Management Inc.'s chief economist, already expects a severe 10.6 percent contraction in U.S. GDP in 2020. New tariffs would increase the uncertainty many households and businesses already face. Moreover, such a move could encourage China to retaliate. The 1930s are a case in point. The imposition of significant (approximately 25 percent) tariffs contributed to a recession morphing into the Great Depression.

Not what companies need

While trade tensions never went away, they were engulfed in the tidal wave of COVID-19 newsflow over the past two months. According to Lori Calvasina, RBC Capital Markets, LLC's head of U.S. equity strategy, the trade war and tariffs were seldom brought up by management teams in the current Q1 2020 earnings season. Throughout 2019, these issues were mentioned by some 40 percent of companies in their quarterly statements.

According to Calvasina, the comments accompanying quarterly earnings statements up to early May indicate that most U.S.

Five key points of the Phase 1 U.S.-China trade deal

Intellectual property	China to implement a legal system of intellectual property protection and enforcement
Chinese purchases	China to purchase \$200 billion worth of American goods and services between Jan. 1, 2020 and Dec. 31, 2021
Technology transfer	China and U.S. to ensure the transfer of technology occurs on voluntary, market-based terms
Currency enforcement	U.S. to remove China from its list of currency manipulators
Financial services	China to allow U.S. financial services firms to apply for asset management company licenses, and to remove foreign equity cap in a number of financial services industries

Source - RBC Wealth Management, Bloomberg

companies, other than those operating in the most distressed sectors, are trying to preserve dividends, at the cost sometimes of suspending share buybacks and cutting capital expenditures, as most see the recession as being transitory. Layering in a rekindled U.S.-China trade conflict and other negatives could be the last straw for a corporate sector already under duress, in her view. There is a limit to how much companies can bend so as not to break.

For the recent stock market rally to be sustainable, in Calvasina's view, much needs to go right given valuations are stretched and the market seems to be assuming a strong rebound in earnings in 2021.

On balance, we think it is unlikely the Trump administration would willingly unleash a new trade war that would crimp an economic recovery, but the possibility of missteps remains. Should tough U.S.-China rhetoric escalate regarding COVID-19 and trade, bouts of volatility cannot be ruled out. Therefore, we think it is prudent to keep some powder dry, and we would hold a below-benchmark, or Underweight, position in global equities.



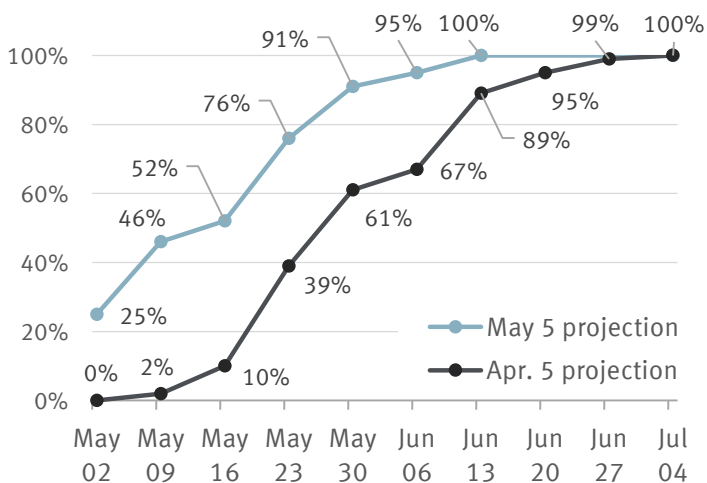
United States

Alan Robinson – Seattle

- U.S. unemployment data was in focus during the week. The ADP private-sector employment report showed 20.2 million jobs were lost in April as many businesses were forced to close shop. The more important **U.S. government jobs report is due on May 8, and consensus forecasts look for a loss of 23 million private-sector jobs, with the unemployment rate jumping to 16%** from the 4.4% reported the prior month. RBC Capital Markets, LLC Chief U.S. Economist Tom Porcelli expects unemployment to peak between 15%–17% in April. However, this data is backward-looking, and Porcelli notes that the **faster-than-expected pace of reopening of businesses in some parts of the country implies we may have already clawed back 20%–25% of the initial wave of job losses.**
- As of May 5, 23 states have reopened at least partially and another nine are set to do so by the middle of the month. However, a nationwide poll conducted by Harvard University the last week of April found that 65% of consumers opposed mandating a return to work without adequate COVID-19 testing. In addition, **the Bloomberg Consumer Comfort Index fell to an all-time low** of 39.5 in April, compared to a record high of 67.3 in late January of this year. These data points suggest to us a reticence to resume pre-COVID-19 consumption trends.
- Other high-frequency data suggests April marked the trough in parts of the economy, although at levels worse than initially expected. **Average sales declines for U.S.**

States under pressure to accelerate economic reopening

Share of U.S. employment captured by state reopening timelines



Source - RBC Capital Markets, Institute for Health Metrics and Evaluation, Bureau of Labor Statistics, New York Times

businesses during the month were estimated around 40% by the Philadelphia Fed, with tentative signs of improvement near the end of the month.

- Earnings season passed its peak during the week. Management teams appeared universally cautious, largely due to a lack of visibility over the trajectory of the economy. **Dividend cuts or suspensions continued to impact individual share prices.** We estimate 58 of the 439 dividend-paying companies in the S&P 500 will have cut their dividends by the end of earnings season, concentrated in the Energy, Financials, and Consumer Discretionary sectors.
- Consumer retail chains **J.Crew Inc. and Neiman Marcus Group entered bankruptcy** during the week. We expect other mall anchors to follow suit if consumer traffic remains weak.



Canada

Arete Zafiriou & Ryan Harder – Toronto

- **COVID-19 continued to weigh on consumer sentiment in April.** According to RBC Economics, in late April **Canadian consumer spending was down 17% from pre-crisis levels**, an improvement from being down 32% at the end of March. Discretionary spending on apparel and jewelry is still less than half its early 2020 average, but household goods and services expenditures have rebounded, led by a rise in spending on construction materials, appliances, and furniture. **Software spending has benefited from the stay-at-home measures**, up almost 70% from its pre-crisis 2020 average. Gas and automotive expenditures fell as much as 38% by mid-April, but have started to rebound likely due to recovering gas prices. Consumers continue to abstain from international travel, with spending down over 90% in late April. Grocery spending remains elevated after spiking in mid-March. However, restaurant spending dropped sharply in March, but is slowly climbing as consumers have started ordering more take-out and delivery.
- **The Bank of Canada (BoC) appointed a new governor** on May 1, naming Tiff Macklem to be the top monetary policymaker in the country starting June 2. After spending nearly 30 years at the BoC, and rising to the senior deputy governor position, he was passed over for the top job in 2013 when the current governor, Stephen Poloz, was chosen. **From a monetary-policy standpoint, Macklem’s outlook seems to fit well with the BoC’s current paradigm:** on the highly relevant topic of negative interest rates, Macklem said he was comfortable with the current floor of 0.25% for the key policy rate, saying that the Bank should be “hesitant about introducing a new source of disruption” to an already disrupted financial system.

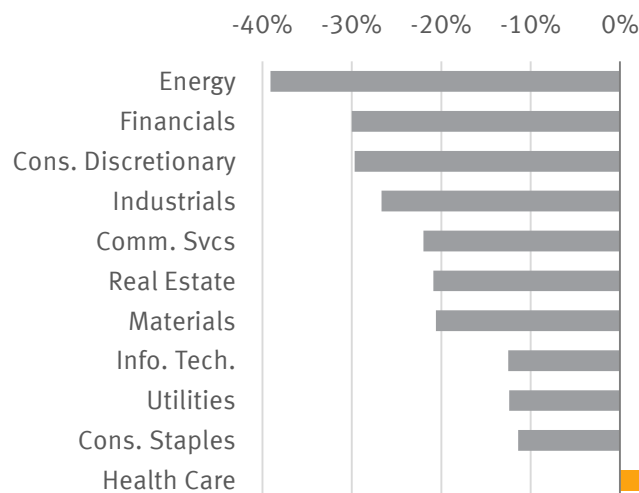


Europe

Alastair Whitfield & Thomas McGarrity, CFA – London

- In Europe, **the German Constitutional Court (GCC) ruled against some aspects of the European Central Bank's (ECB) asset purchase programme**, in a largely symbolic move. While the ECB is not bound by the GCC ruling, it could stoke fears around the current programme. In our view, it seems more likely that the ECB will need to reassert the importance and benefits of its current measures and look to extend these if necessary to support the euro area rather than risk fragmentation between northern and southern Europe, as occurred during the 2012 sovereign debt crisis.
- In the UK, **the Bank of England maintained interest rates at 0.1% and its current quantitative easing (QE) programme at £200 billion**. There were dissenting votes calling for increasing QE by a further £100 billion, and given the dovish rhetoric in the meeting minutes, **we think it likely that an increase in QE has only been postponed until the next meeting**, in June. The accompanying Monetary Policy Report also provided an assessment of the COVID-19 pandemic's impact on the UK economy. Based on the current lockdown remaining in place until early June, **the report suggested Q2 real GDP would decline by 25%, with annual GDP down 14% for 2020 and unemployment rising to 9% in Q2 from the current 4% level**.
- Two-thirds of the STOXX Europe 600 Index (Europe + UK) members that were due to report have now released Q1 results. **Aggregate sales growth is running at -6% y/y, while earnings per share are down 25%**. Unsurprisingly, **cyclical sectors are reporting very weak Q1 earnings**, especially

STOXX Europe 600 year-to-date sector performance



Source - RBC Wealth Management, Bloomberg

Financials, Energy, and Consumer Discretionary. The main bright spot has been the Health Care sector, where sales are up 11% y/y and earnings per share have grown 16% y/y. **Health Care is the only sector in the STOXX Europe 600 Index to be in positive territory year-to-date (+1.2% versus the index's -18.9%)**. Despite its significant outperformance, we believe the sector should continue to be a key Overweight in pan-European equity portfolios.



Asia Pacific

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

- **The market had been anticipating “revenge spending” post the lockdown**. However, data from China's Labor Day holiday (May 1–May 5) showed **mixed signals**.
- According to the Ministry of Commerce, **average daily sales of key retail businesses monitored jumped 30.1%** from the week before the holiday.
- However, during the holiday, China recorded 115 million tourist trips domestically, with **tourism revenue of RMB 47.56 billion**, according to the Ministry of Culture and Tourism. That's a **59.6% slump** compared to last year's Labor Day holiday, which was one day shorter.
- On the other hand, **household deposits at the country's banks climbed RMB 6.47 trillion** in Q1 2020, up 13% y/y, according to the People's Bank of China.
- We think after the virus outbreak, **people may prefer to increase their deposits instead of spending due to the uncertainty of the economy**. Therefore, revenge spending may not be as strong as expected. However, we think **offline consumption will recover** as the lockdown is lifted. Therefore, sectors such as restaurants, beer, apparel and jewelry, etc., could benefit.
- While the risk of trade tension is increasing again, **Reuters reported that, according to unnamed sources, the U.S. Department of Commerce may sign off on a new rule that would allow U.S. companies to work with China's Huawei Technologies** on setting standards for 5G networks. Starting last year, U.S. companies were no longer allowed to develop standards with the world's largest telecommunications equipment maker, which made it difficult for companies to develop their patented technology. The sources said the draft is under final review at the Department of Commerce, and would be sent to other agencies for their approval. It is unclear how long the full process will take. Both the Department of Commerce and Huawei declined to comment for the report.



MARKET SCORECARD

Data as of May 7, 2020

Equities (local currency)	Level	MTD	YTD	1 yr	2 yr
S&P 500	2,881.19	-1.1%	-10.8%	-0.1%	7.8%
Dow Industrials (DJIA)	23,875.89	-1.9%	-16.3%	-8.0%	-2.0%
NASDAQ	8,979.66	1.0%	0.1%	12.8%	23.6%
Russell 2000	1,282.93	-2.1%	-23.1%	-18.9%	-18.7%
S&P/TSX Comp	14,833.69	0.4%	-13.1%	-9.3%	-6.2%
FTSE All-Share	3,270.55	0.2%	-22.1%	-17.9%	-21.4%
STOXX Europe 600	337.98	-0.6%	-18.7%	-11.4%	-13.2%
EURO STOXX 50	2,880.60	-1.6%	-23.1%	-15.3%	-19.2%
Hang Seng	23,980.63	-2.7%	-14.9%	-18.3%	-20.0%
Shanghai Comp	2,871.52	0.4%	-5.9%	-1.9%	-8.5%
Nikkei 225	19,674.77	-2.6%	-16.8%	-10.3%	-12.4%
India Sensex	31,443.38	-6.7%	-23.8%	-17.9%	-10.7%
Singapore Straits Times	2,591.60	-1.2%	-19.6%	-21.8%	-26.6%
Brazil Ibovespa	78,118.60	-3.0%	-32.4%	-17.2%	-5.6%
Mexican Bolsa IPC	36,792.41	0.9%	-15.5%	-15.6%	-20.8%
Commodities (USD)	Price	MTD	YTD	1 yr	2 yr
Gold (spot \$/oz)	1,717.47	1.8%	13.2%	33.7%	30.7%
Silver (spot \$/oz)	15.35	2.5%	-14.0%	2.9%	-6.8%
Copper (\$/metric ton)	5,167.50	0.1%	-16.0%	-16.2%	-23.9%
Oil (WTI spot/bbl)	23.55	25.0%	-61.4%	-61.6%	-66.7%
Oil (Brent spot/bbl)	29.44	16.5%	-55.4%	-57.9%	-61.3%
Natural Gas (\$/mmBtu)	1.91	-2.3%	-13.0%	-24.9%	-30.5%

Govt bonds (bps chg)	Yield	MTD	YTD	1 yr	2 yr
U.S. 10-Yr Tsy	0.633%	-0.6	-128.5	-182.4	-231.7
Canada 10-Yr	0.544%	-0.3	-115.8	-114.0	-178.3
U.K. 10-Yr	0.235%	0.4	-58.7	-92.3	-116.5
Germany 10-Yr	-0.545%	4.1	-36.0	-50.7	-107.7

Fixed Income (returns)	Yield	MTD	YTD	1 yr	2 yr
U.S. Aggregate	1.39%	-0.5%	4.4%	9.9%	16.2%
U.S. Invest Grade Corp	2.78%	-1.2%	0.2%	8.4%	16.0%
U.S. High Yield Corp	7.99%	0.2%	-8.5%	-3.7%	2.6%

Currencies	Rate	MTD	YTD	1 yr	2 yr
U.S. Dollar Index	99.8740	0.9%	3.6%	2.3%	7.7%
CAD/USD	0.7148	-0.3%	-7.1%	-3.7%	-7.9%
USD/CAD	1.3991	0.3%	7.7%	3.8%	8.6%
EUR/USD	1.0831	-1.1%	-3.4%	-3.2%	-9.2%
GBP/USD	1.2364	-1.8%	-6.7%	-5.4%	-8.8%
AUD/USD	0.6492	-0.3%	-7.5%	-7.4%	-13.6%
USD/JPY	106.2800	-0.8%	-2.1%	-3.6%	-2.6%
EUR/JPY	115.1000	-2.0%	-5.5%	-6.7%	-11.5%
EUR/GBP	0.8760	0.7%	3.6%	2.3%	-0.4%
EUR/CHF	1.0539	-0.4%	-2.9%	-7.6%	-11.8%
USD/SGD	1.4141	0.3%	5.1%	3.8%	5.9%
USD/CNY	7.0842	0.3%	1.7%	4.5%	11.3%
USD/MXN	24.0413	-0.6%	27.0%	26.3%	23.5%
USD/BRL	5.8485	6.6%	45.1%	54.8%	64.7%

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 5/7/20.

Examples of how to interpret currency data: CAD/USD 0.71 means 1 Canadian dollar will buy 0.71 U.S. dollar. CAD/USD -7.1% return means the Canadian dollar fell 7.1% vs. the U.S. dollar year to date. USD/JPY 106.28 means 1 U.S. dollar will buy 106.28 yen. USD/JPY -2.1% return means the U.S. dollar fell 2.1% vs. the yen year to date.

Authors

Frédérique Carrier – London, United Kingdom

frederique.carrier@rbc.com; RBC Europe Limited

Alan Robinson – Seattle, United States

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

Ryan Harder – Toronto, Canada

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

Arete Zafiriou – Toronto, Canada

arete.zafiriou@rbc.com; RBC Dominion Securities Inc.

Thomas McGarrity, CFA – London, United Kingdom

thomas.mcgarritty@rbc.com; RBC Europe Limited

Alastair Whitfield – London, United Kingdom

alastair.whitfield@rbc.com; RBC Europe Limited

Jasmine Duan – Hong Kong, China

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

Nicholas Gwee, CFA – Singapore

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

Disclosures and Disclaimer

Analyst Certification

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

Important Disclosures

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

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

In the event that this is a compendium report (covers six or more companies), RBC Wealth Management may choose to provide

important disclosure information by reference. To access current disclosures, clients should refer to <https://www.rbcm.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' ratings of Outperform (O), Sector Perform (SP), and Underperform (U) 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 [Outperform]	755	51.64	220	29.14
Hold [Sector Perform]	619	42.34	126	20.36
Sell [Underperform]	88	6.02	11	12.50

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:

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.

As of March 31, 2020, RBC Capital Markets discontinued its Top Pick rating. Top Pick rated securities represented an analyst's best idea in the sector; expected to provide significant absolute returns over 12 months with a favorable risk-reward ratio. Top Pick rated securities have been reassigned to our Outperform rated securities category, which are securities expected to materially outperform sector average over 12 months.

Risk Rating:

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

Valuation and Risks to Rating and Price Target

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

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

Other Disclosures

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

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

Management Financial Advisor for more information regarding RBC Wealth Management research.

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

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

Research Resources

This document is produced by the Global Portfolio Advisory Committee within RBC Wealth Management's Portfolio Advisory Group. The RBC WM Portfolio Advisory Group provides support related to asset allocation and portfolio construction for the firm's Investment Advisors / Financial Advisors who are engaged in assembling portfolios incorporating individual marketable securities. The Committee leverages the broad market outlook as developed by the RBC Investment Strategy Committee, providing additional tactical and thematic support utilizing research from the RBC Investment Strategy Committee, RBC Capital Markets, and third-party resources.

Third-party disclaimers

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

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

Disclaimer

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

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

investing, including currency fluctuation, foreign taxation, political instability and different accounting standards.

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

RBC Wealth Management (British Isles): This publication is distributed by RBC Europe Limited and RBC Investment Solutions (CI) Limited. RBC Europe Limited is authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority (FCA registration number: 124543). Registered office: Riverbank House, 2 Swan Lane, London, EC4R 3BF, UK. RBC Investment Solutions (CI) Limited is regulated by the Jersey Financial Services Commission in the conduct of investment business in Jersey. Registered office: Gaspé House, 66-72 Esplanade, St Helier, Jersey JE2 3QT, Channel Islands, registered company number 119162.

To Hong Kong Residents: This publication is distributed in Hong Kong by Royal Bank of Canada, Hong Kong Branch which is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission ('SFC'), and RBC Investment Services (Asia) Limited, which is regulated by the SFC.

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

© RBC Capital Markets, LLC 2020 – Member NYSE/FINRA/SIPC

© RBC Dominion Securities Inc. 2020 – Member Canadian Investor Protection Fund

© RBC Europe Limited 2020

© Royal Bank of Canada 2020

All rights reserved

RBC1253