

## ECB turns hawkish

Frédérique Carrier – London

The European Central Bank, which had until now ruled out interest rate increases this year, adopted a hawkish tone that took financial markets by surprise. We look at the factors which led to this change, and explain how the eurozone's strengthened institutions should hold it in good stead for this monetary tightening cycle. We look at portfolio implications.

### A surprisingly hawkish tone

Although it left both policy rates and the pace of asset purchases unchanged, the European Central Bank (ECB) adopted a hawkish tilt at its February meeting in a stark reversal of its long-standing position. Markets are now pricing in the first increase in interest rates as early as June, as opposed to December previously, and 0.40 percent in rate hikes by the end of 2022.

The resilience of the eurozone in the face of the omicron wave, tightening labour markets, and increasing inflation all led to this abrupt change of stance.

### A resilient economy

Despite COVID-19 restrictions and supply-chain shortages, eurozone GDP grew 0.3 percent quarter over quarter (q/q) in Q4. While a marked slowdown from the 2.3 percent q/q growth generated in Q3, we think it points to some resilience under difficult circumstances.

The regional contribution to growth has changed markedly, however, with France and Italy driving growth, posting quarterly GDP increases of 0.7 percent and 0.6 percent, respectively. By contrast, the German economy, historically the engine of growth for the bloc, shrank by 0.7 percent in the period, due to supply-chain shortages

in the automotive industry. While this performance is disappointing, there are signs manufacturing production started to improve in December. Overall, GDP in 2021 grew 4.6 percent in the eurozone, with seven percent in France, 6.5 percent in Italy, and a more muted 2.8 percent in Germany.

Q1 2022 is off to an encouraging start, with economic activity indicators pointing to continued expansion. Growth is likely to pick up later in the year, as supply-chain shortages ease. For now, the consensus expectation is for above-trend GDP growth of 4.1 percent in 2022, as financial support from the EU recovery fund contributes fully. As such, for the first time in five years the bloc's economic growth is likely to exceed that of the U.S. However, two factors need to be monitored closely—labour markets and the energy crisis.

### Tight labour markets

Labour markets recovered further in December, with the overall unemployment rate falling below its pre-pandemic level, to seven percent, thanks to strong demand. Job vacancies are higher now than in 2019 due to a decline in active participation and reduced cross-border mobility, both caused by the pandemic. There also seems to be a shortage of skills necessary for the green transition.

For perspectives on the week from our regional analysts, please see [pages 3–4](#).

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.

Priced (in USD) as of 2/10/22 market close, ET (unless otherwise stated). Produced: Feb. 10, 2022 1:40 pm ET; Disseminated: Feb. 10, 2022 4:42 pm ET  
For important disclosures, required non-U.S. analyst disclosures, and authors' contact information, see page 6.

The European Commission's euro area Employment Expectations Indicator (EEI), which measures companies' hiring expectations over the next three months, stands only slightly below its highest level on record, pointing to strong hiring going forward. Should labour demand continue its strong recovery, wage increases, which are currently running at low single-digit levels, could accelerate, at least in some sectors, fuelling inflation.

## The energy crisis

Higher energy prices, natural gas prices in particular, are denting consumers' purchasing power. EU natural gas prices have increased close to 300 percent over the past year. Most governments have put in place measures to reduce the impact of high energy costs, ranging from capping consumer gas prices in 2022, as France did, to reducing taxes, such as was done by Italy and Spain, which reduced the consumer sales tax on energy. While this may take the sting from the vertiginous increase in prices, gas prices remain elevated and the risk is that consumers may well respond by cutting spending elsewhere.

The energy crisis is also having a major impact on inflation, which came in higher than expected in January. The headline harmonised index of consumer prices reached 5.1 percent. Energy prices were the main driver, as core inflation was a more subdued 2.3 percent for the euro area as a whole.

That energy is such an important element of the current surge in inflation is also visible in the large spread of national inflation, with France—which has capped energy prices—at one end of the spectrum with inflation of 3.3 percent and Lithuania (12.2 percent) at the other.

RBC Capital Markets expects inflation to continue to moderate throughout 2022 as the contribution of energy gradually normalises, though it now expects inflation to fall below the ECB's two percent target later than previously anticipated—by 2023.

## Fear and trepidation?

The last time the ECB tightened monetary policy, in 2011, after the global financial crisis, it caused significant volatility in financial markets and choked off the recovery. The central bank soon had to abandon its policy. Since then, important progress has been made aiming to strengthen regional institutions.

In particular, we think the establishment in 2020 of the €750 billion EU recovery fund points to a willingness to share fiscal burdens. Financed by borrowing on behalf of the EU as a whole, the fund is largely allocated to southern member countries as they have suffered the most from the pandemic. The Banking Union, established a decade ago, ensures that if a financial institution needs to be recapitalised

after bond and equity investors have been tapped, the European Stability Mechanism, an intergovernmental organisation which provides financial assistance, can be accessed, so that the host country is no longer the sole recourse. Moreover, the banking system is now much stronger, as the banks, prompted by regulators, have taken steps to rebuild their balance sheets. Finally, the ECB has given itself more tools to manage volatility in financial markets.

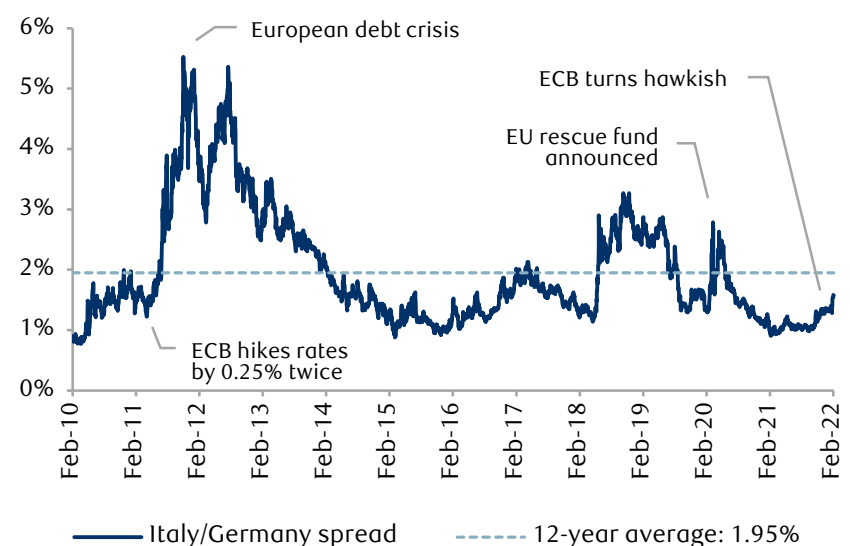
These structural changes suggest to us that the region should better withstand the upcoming monetary tightening cycle. Nevertheless, the ECB plans to keep a close eye on how its highly indebted member countries are impacted by its actions. Italian sovereign 10-year bond yield spreads relative to their German counterpart have already widened since the ECB meeting, though they remain much below their 12-year average.

## Maintain Overweight

The 2022 global investment backdrop has already set out to be more volatile than last year's. That also applies to European equities, particularly given the tensions between the West and Russia. Yet we continue to suggest holding an Overweight, or above-benchmark, position in this asset class. Given the prospect of above-average economic growth this year, we believe earnings growth expectations of around seven percent are undemanding, leaving room for upgrades. Valuations have improved and the MSCI Europe ex UK Index trades at a forward price-to-earnings ratio of 14.3x, below its five-year average. As for sectors, we think Financials appears well positioned to benefit from higher interest rates and the robust growth outlook, while the Industrials sector could also provide attractive opportunities given Europe is a leader in green technologies.

## The spread of Italian sovereign bond yields to German bond yields has started to widen

Yield gap of Italian 10-year government bonds over German counterparts



Source - RBC Wealth Management, Bloomberg; data through 2/9/22

## UNITED STATES

Atul Bhatia, CFA – Minneapolis

■ **U.S. prices rose at the fastest pace since 1982 last month**, with the January Consumer Price Index (CPI) 7.5% higher y/y and so-called core inflation (which removes volatile food and energy prices) up 6% in the same time period. The increases were led by food, electricity, and shelter costs, but gains were broad-based and included components such as medical costs that had shown relative price stability in prior reports. One potential positive for policymakers is that **inflation remains heavily tilted to goods rather than services**, with prices for the former rising at nearly three times the pace of the latter. As supply-chain issues are resolved, **we expect some downward pressure on future CPI levels**—although it will likely be some time before we approach the Fed’s 2% target, in our view.

■ **January’s nonfarm payrolls report showed significant progress in the labor market.** Not only did the U.S. add nearly half a million jobs to start the year—despite the omicron variant’s impact—but revisions to last year’s numbers showed 700,000 more jobs were created in 2021 than were initially reported. The U.S. has now recovered all but three million of the jobs destroyed during the pandemic, a notable improvement from the 22 million jobs lost in April 2020. **Adding to the positive jobs sentiment was a third week of declines in initial jobless claims**, as continuing labor shortages have led companies to discharge workers at the slowest pace in at least 20 years.

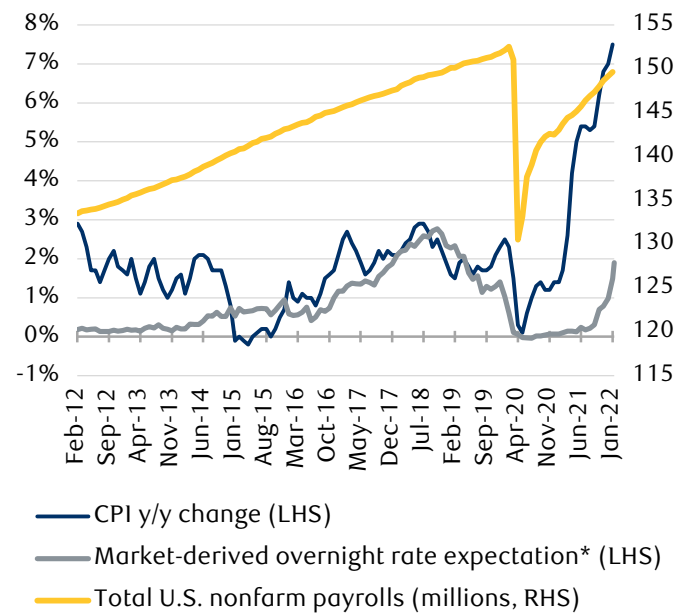
■ **With employment largely recovered and inflation significantly above target, the consensus expectation—which we share—is for the Fed to begin rolling back pandemic accommodation at its March meeting.** Market pricing following the January CPI report now reflects a meaningful probability of a 0.5% hike in the federal funds target rate at the next meeting, as opposed to the earlier consensus expectation of 0.25%. A larger initial hike may not be entirely negative for investors in longer-maturity bonds, however, if the faster start presages a lower terminal rate for this hiking cycle. With five weeks remaining until the next scheduled Fed meeting, **incoming data may lead to further shifts in market expectations on policy.**

## CANADA

Sean Killin & Richard Tan, CFA – Toronto

■ Unlike the equity markets, **the Canadian real estate market carried forward its momentum** with key metropolitan cities posting year-over-year price gains in January. In our view, three factors have been driving the price gains in the Canadian housing market. To begin, supply remains low by historical standards and demand continues to be robust as households reprioritize the need for larger spaces in a hybrid/remote working environment. Second, real assets are generally viewed as

## Rising inflation and employment drive expectations for faster Fed action



\* Expected one-month average starting in one year

Source - RBC Wealth Management, Bloomberg; monthly data through 1/31/22

a potential hedge against inflation, and thus the above-average inflation prints have likely contributed to the upward swing in the real estate market. Third, a rising rate environment likely means consumers with mortgage preapprovals from the last few months are likely being quoted at materially lower rates compared to today’s market. As a result, we believe some consumers are being motivated to close on a property and to secure more attractive financing ahead of rate hikes. Overall, **RBC Economics believes prices will continue to climb in 2022**, albeit at a slower pace year-over-year.

■ **The omicron variant’s economic impact is set to be noteworthy but ultimately short-lived across Canadian labour markets, in our view.** The unemployment rate rose to 6.5% in January from 6.0% in December, as the economy shed approximately 200,000 jobs as a result of broad public-health measures implemented by Ontario and Quebec, Canada’s most populated provinces. Unsurprisingly, these losses were mainly concentrated in high-contact service-sector jobs, as the hospitality and food service industries continue to be disproportionately affected by pandemic public-health restrictions. The variant’s high level of transmissibility led to a 2.2% decrease in hours worked, which is the largest drop since April of last year, as 10% of employees were absent from their jobs at some point in the month due to illness or an inability to work. **The Bank of Canada held its benchmark rate unchanged at its January policy meeting**, citing the preliminary impact of the variant’s spread, **but it continued to signal that rate hikes are coming soon.** Despite January’s labour force survey coming in worse than the months prior, RBC Economics expects a recovery to start in February with public-health measures easing across the country.

## EUROPE

Rufaro Chiriseri, CFA & Thomas McGarrity, CFA – London

■ **Following the hawkish tone from the Bank of England and European Central Bank (ECB) last Thursday, the tantrum in bond markets continued during the week.**

The yield on UK 10-year Gilts soared to 1.51%, a level last seen in November 2018, while the German 10-year Bund rose to 0.279%, its highest level since January 2019, having been in negative-yielding territory from May 7, 2019 until Jan. 31 of this year.

■ The European bond market selloff has been more pronounced in the heavily indebted nations of Italy and Greece, which have debt levels around 160% and 200% of GDP, respectively, as of the end of 2021. Both nations have benefited from the ECB's bond buying through the Pandemic Emergency Purchase Programme, which has kept borrowing costs low for the euro area. **We now expect a faster tapering of bond purchases, and therefore see potential for yields to rise further from current levels.** The cost of borrowing over 10 years has doubled for Italy and Greece since last December's ECB meeting, and the ECB will be closely watching these rising yields when deliberating its forward guidance.

■ The standout beneficiaries this year from the hawkish pivots by central banks have been Banks stocks in a sector context, and the UK's FTSE 100 Index from a regional equity market perspective.

■ **European and UK banks are among the most rate-sensitive globally;** accordingly, the upward repricing in front-end interest rates should benefit their net interest margins and thus improve their earnings outlooks. Within the STOXX Europe 600 Index, Banks are up almost 15% year to date.

■ The UK's FTSE 100 Index, of which almost 40% comprises Financials, Energy, and Miners, is up around 3.5% in 2022, buoyed by the **market rotation towards "value" investing amid the sharp rise in yields.** The relative performance of UK equities has the highest correlation to value outperforming growth of any major region, according to our national research sources, and thus the UK tends to be one of the best-performing regions when the value style outperforms.

## ASIA PACIFIC

Jasmine Duan – Hong Kong

■ **China announced travel and consumption data for the Lunar New Year holiday.** During the seven-day national holiday, about 130 million passenger trips were taken via road, rail, and other domestic transport routes, a 31.7% increase over 2021, but still nearly 70% below pre-pandemic levels. Domestic tourism revenue reached RMB 289.2 billion over the seven days, down 3.9% y/y, and 56.3%

## Caixin China Services Purchasing Managers' Index fell to the lowest level since August 2021



Source - RBC Wealth Management, Bloomberg; monthly data through 1/31/22

of the 2019 level. In addition, the Caixin China Services Purchasing Managers' Index fell to 51.4 for January from 53.1 in December, its lowest level since August 2021. **The domestic consumption recovery remains lackluster,** being largely affected by local COVID-19 containment measures and people still cautious toward travelling and spending.

■ **The U.S. Commerce Department added 33 Chinese entities to its Unverified List (UVL) on Monday.** These entities are primarily high-tech manufacturers (including those that produce laser components and pharmaceuticals), government research labs, and two universities. The Commerce Department adds parties to the list if it is unable to verify the end use of U.S. exports by those entities. U.S. exporters must apply for a licence to export certain items to companies on the UVL. We note that the UVL is different from the Entity List and the Military End User List. The UVL could increase procedural and licensing costs in the purchase of raw materials, but does not bar companies from doing business with U.S. entities. However, we think this development could be a short-term overhang for the share prices of newly added companies.

■ **The People's Bank of China said in a statement on Tuesday that bank loans to fund low-cost rental projects will no longer be subject to regulatory curbs.** The rules required banks to trim their loan exposure to the property sector to a certain level. The measure may help counter the slowdown in property development and ease some funding pressure on developers.



# MARKET Scorecard

Data as of February 10, 2022

Equities (local currency)	Level	MTD	YTD	1 yr	2 yr
S&P 500	4,504.08	-0.3%	-5.5%	15.2%	34.4%
Dow Industrials (DJIA)	35,241.59	0.3%	-3.0%	12.1%	20.4%
Nasdaq	14,185.64	-0.4%	-9.3%	1.5%	47.3%
Russell 2000	2,051.16	1.1%	-8.6%	-10.1%	23.0%
S&P/TSX Comp	21,531.72	2.1%	1.5%	16.7%	21.4%
FTSE All-Share	4,296.96	2.5%	2.1%	15.4%	3.8%
STOXX Europe 600	472.35	0.7%	-3.2%	15.4%	11.2%
EURO STOXX 50	4,197.07	0.5%	-2.4%	15.0%	10.6%
Hang Seng	24,924.35	4.7%	6.5%	-17.0%	-8.5%
Shanghai Comp	3,485.91	3.7%	-4.2%	-4.6%	20.6%
Nikkei 225	27,696.08	2.6%	-3.8%	-6.3%	16.9%
India Sensex	58,926.03	1.6%	1.2%	14.8%	43.8%
Singapore Straits Times	3,428.00	5.5%	9.7%	17.2%	8.4%
Brazil Ibovespa	113,367.80	1.1%	8.2%	-4.3%	0.7%
Mexican Bolsa IPC	52,599.58	2.5%	-1.3%	17.6%	18.8%
Gov't bonds (bps change)	Yield	MTD	YTD	1 yr	2 yr
U.S. 10-Yr Treasury	2.042%	26.5	53.2	91.9	47.2
Canada 10-Yr	1.944%	17.3	51.8	95.5	63.3
UK 10-Yr	1.524%	22.2	55.3	103.5	96.7
Germany 10-Yr	0.284%	27.3	46.1	72.1	69.5
Fixed income (returns)	Yield	MTD	YTD	1 yr	2 yr
U.S. Aggregate	2.30%	-1.1%	-3.2%	-3.9%	0.4%
U.S. Investment-Grade Corp	2.95%	-1.2%	-4.5%	-4.3%	1.2%
U.S. High-Yield Corp	5.37%	-0.1%	-2.9%	0.9%	8.8%
Commodities (USD)	Price	MTD	YTD	1 yr	2 yr
Gold (spot \$/oz)	1,826.34	1.6%	-0.2%	-0.9%	16.2%
Silver (spot \$/oz)	23.19	3.2%	-0.5%	-14.2%	30.5%
Copper (\$/metric ton)	10,103.00	5.5%	3.7%	21.7%	78.8%
Oil (WTI spot/bbl)	89.88	2.0%	16.7%	53.2%	81.3%
Oil (Brent spot/bbl)	91.31	0.1%	17.4%	48.5%	71.4%
Natural Gas (\$/mmBtu)	3.95	-19.0%	5.8%	35.6%	123.6%
Currencies	Rate	MTD	YTD	1 yr	2 yr
U.S. Dollar Index	95.7810	-0.8%	0.1%	6.0%	-3.1%
CAD/USD	0.7858	-0.1%	-0.7%	-0.2%	4.6%
USD/CAD	1.2726	0.1%	0.7%	0.2%	-4.4%
EUR/USD	1.1418	1.6%	0.4%	-5.8%	4.6%
GBP/USD	1.3553	0.8%	0.2%	-2.0%	4.9%
AUD/USD	0.7161	1.3%	-1.4%	-7.3%	7.1%
USD/JPY	116.0600	0.8%	0.9%	11.0%	5.7%
EUR/JPY	132.5200	2.5%	1.2%	4.5%	10.6%
EUR/GBP	0.8425	0.9%	0.1%	-3.8%	-0.3%
EUR/CHF	1.0582	1.6%	2.0%	-1.9%	-0.8%
USD/SGD	1.3454	-0.4%	-0.3%	1.4%	-3.2%
USD/CNY	6.3541	-0.1%	0.0%	-1.6%	-9.0%
USD/MXN	20.5745	-0.3%	0.2%	2.7%	10.0%
USD/BRL	5.2497	-1.1%	-5.8%	-2.5%	21.4%

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.

Examples of how to interpret currency data: CAD/USD 0.78 means 1 Canadian dollar will buy 0.78 U.S. dollar. CAD/USD -0.07% return means the Canadian dollar fell 0.7% vs. the U.S. dollar year to date. USD/JPY 116.06 means 1 U.S. dollar will buy 116.06 yen. USD/JPY 0.9% return means the U.S. dollar rose 0.9% vs. the yen year to date.

Source - Bloomberg; data as of 4:35 pm ET 2/10/22

## Authors

### Frédérique Carrier – London, United Kingdom

frederique.carrier@rbc.com; RBC Europe Limited

### Atul Bhatia, CFA – Minneapolis, United States

atul.bhatia@rbc.com; RBC Capital Markets, LLC

### Sean Killin – Toronto, Canada

sean.killin@rbc.com; RBC Dominion Securities Inc.

### Richard Tan, CFA – Toronto, Canada

richard.tan@rbc.com; RBC Dominion Securities Inc.

### Rufaro Chiriseri, CFA – London, United Kingdom

rufaro.chiriseri@rbc.com; RBC Europe Limited

### Thomas McGarrity, CFA – London, United Kingdom

thomas.mcgarrrity@rbc.com; RBC Europe Limited

### Jasmine Duan – Hong Kong, China

jasmine.duan@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.

One or more research analysts involved in the preparation of this report (i) may not be registered/qualified as research analysts with the NYSE and/or FINRA and (ii) may not be associated persons of the RBC Wealth Management and therefore may not be subject to FINRA Rule 2241 restrictions on communications with a subject company, public appearances and trading securities held by a research analyst account.

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.

## 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.

### Distribution of ratings – RBC Capital Markets, LLC Equity Research As of December 31, 2021

Rating	Count	Percent	Investment Banking Services Provided During Past 12 Months	
			Count	Percent
Buy [Outperform]	831	57.59	365	43.92
Hold [Sector Perform]	557	38.60	180	32.32
Sell [Underperform]	55	3.81	3	5.45

## 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.

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.

**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.

**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.

### 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 Royal Bank of Canada (Channel Islands) 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: 100 Bishopsgate, London, EC2N 4AA, UK. Royal Bank of Canada (Channel Islands) 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.

**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.

© 2022 RBC Capital Markets, LLC – Member NYSE/FINRA/SIPC  
© 2022 RBC Dominion Securities Inc. – Member Canadian Investor Protection Fund  
© 2022 RBC Europe Limited  
© 2022 Royal Bank of Canada  
All rights reserved  
RBC1253



Wealth  
Management