GLOBAL Insight

Perspectives from the Global Portfolio Advisory Committee

December 8, 2022

Wealth

Management

The one big thing

The Global Portfolio Advisory Committee

With a U.S. recession looming in the distance, what are the consequences for investors? Our 2023 Outlook examines the issues and opportunities facing markets and asset classes in 2023.

Market overview: We are the hedgehog

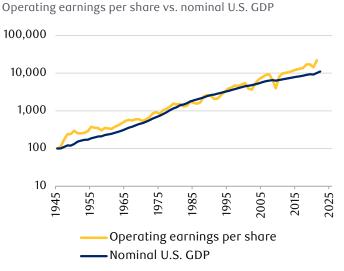
"The fox knows many things, but the hedgehog knows one big thing" is an aphorism which argues for the usefulness of thinking one way or the other. Right now, we feel more like the hedgehog... we know one big thing—the arrival of a U.S. recession in 2023—that should shape the investment landscape over the coming year.

Several leading indicators, including short-term interest rates being higher than long-term rates, point to a recession. Moreover, interest rates are now prohibitively high while banks are increasingly reluctant to lend. We expect rates will rise somewhat further in the first half of 2023 before falling in the second.

The arrival of a recession would have consequences for investors. U.S. recessions have typically been associated with global equity bear markets. So we believe any equity market rally over the next few weeks or months will, at some point, give way to another period of falling share prices reflecting declining expectations for earnings and the eroding confidence in the future that typically comes with a period of economic retrenchment.

Yet investors should keep in mind that the stock market has always turned higher well before the recession ends, usually three to five months before. Moreover, recessions typically are short-lived and already successful companies should have the ability to adapt to new

Corporate earnings have outpaced economic growth



Since 1945, nominal U.S. GDP has risen by 6.4% per annum, while earnings have risen by 7.3% per annum on average.

Source - RBC Wealth Management, Standard & Poor's, U.S. Federal Reserve; annual data shown on a logarithmic scale

circumstances. Looking at the chart above, the 13 U.S. recessions since 1945 are barely visible on the nominal GDP line, while operating earnings per share always have ultimately recovered.

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 12/7/22 market close (unless otherwise stated). Produced: 12/8/22 2:27 pm ET; Disseminated: 12/8/22 3:00 pm ET For important disclosures, required non-U.S. analyst disclosures, and authors' contact information, see <u>page 6</u>.

Against this backdrop, as we enter 2023, we would lean more heavily toward quality and sustainable dividends, and away from individual company risks that may come home to roost in a recession.

U.S.: Swift change of direction possible

We expect 2023 will be punctuated by a markedly slower economy, and the end of the Fed rate hike cycle.

Against this backdrop, several factors suggest 2023 should be better for equity investors than 2022. Back-toback negative return years are rare, while equity market sentiment could benefit from declining inflation in 2023.

Yet investors should remain vigilant, in our view. If S&P 500 earnings come in flat next year around \$220 per share or less, this would leave little room for valuation expansion. Ensuring portfolios are in line with long-term strategic allocation recommendations and being alert to opportunities which may appear as the macroeconomic situation becomes clearer will be key, in our opinion.

Small caps and midcaps are relatively inexpensive and tend to lead early stages of bull markets, while we favour the Energy sector within large caps.

In fixed income, with the economy likely to slow around midyear and the Fed potentially to start cutting rates in the latter part of the year, the benchmark 10-year Treasury yield has already dropped below 3.50 percent in anticipation of this, and could face further downside pressure into 2023. We would thus lock in historically high yields in intermediate and longer-dated bonds to maintain income and to benefit from capital appreciation if recession risks and the potential for Fed rate cuts push yields lower, and bond prices higher.

Canada: Looking beyond likely recession

Tighter monetary policy and waning household consumption suggest to us that the economy will slip into recession in 2023.

It can be argued that at current valuations the S&P/TSX Composite Index is already pricing in a modest recession. Canadian banks, in particular, could provide an interesting opportunity for investors who can see through the valley of the expected upcoming economic contraction.

Given the tight supply outlook following years of underinvestment in the oil industry, the solid commodity outlook paired with attractive free cash flow generation support maintaining allocations to energy stocks, in our view.

After a difficult 2022, we see opportunities in 3- to 7-year investment-grade corporate bonds as we believe yields offer a reasonable level of income while keeping both credit and interest rate risk modest. For investors willing to assume equity-like risk, rate-reset preferred shares also look relatively inexpensive, given their significant 2022 price decline despite a substantial increase to the 5-year yield they are reset off.

UK: Austerity during a recession

A crippling cost of living crisis, austerity measures, and the Bank of England tightening monetary policy will all conspire to create a prolonged recession, in our opinion. For equities, we prefer internationally-oriented defensive stocks and cyclicals positioned for long-term structural trends such as decarbonisation. There could be an opportunity later in the year in small caps and midcaps.

We have a negative view on Gilts as government issuance will likely hit a record high even as the Bank of England starts selling its portfolio of Gilts accumulated during the pandemic. It is not clear that there will be demand for this deluge of supply, in our view.

Europe: Hostage to a geopolitical conflict

We expect a mild recession in Europe, though this scenario could prove too optimistic if there are energy shortages this winter or too pessimistic if China reopens swiftly. Discounted equity valuations and severe fund outflows in 2022 reflect investors' concerns. We maintain our bias for quality, globally diversified companies that possess strong pricing power—in particular, global leaders within the pharmaceuticals, technology, luxury, and capital goods industries.

As for fixed income, we see opportunities in corporate credit where yields have significantly increased versus a year ago and should compensate for interest rate risk.

China's new strategic agenda, Japan's inflation

We expect volatility in Chinese equities to persist as long as investors debate the focus of future economic policy, and COVID-19 restrictions continue. Nevertheless, we believe there are opportunities in areas tied to the country's long-term development blueprint such as energy and food security, high-end manufacturing, and new green energy supply chains.

In Japan, the reopening of the economy after the pandemic could lead to above-average GDP growth. Inflation making a return could represent a sea change in corporate pricing behaviour as corporations increasingly hike prices to reflect higher input costs.

On the fixed income front, we prefer Asia ex-China investment-grade bonds, particularly those issued by what we see as quality Asian corporates with conservative balance sheets and government-linked companies that may benefit from implicit government support.

For more details on these views, as well as forecasts for commodities and currencies, please have a look at our complete <u>Global Insight 2023 Outlook</u> or the individual articles: <u>We are the hedgehog</u> (feature article), as well as the regional focus commentaries on <u>the U.S., Canada</u>, <u>the UK, Europe</u>, and <u>Asia</u>.

UNITED STATES

Tyler Frawley, CFA – Minneapolis

■ U.S. equities are on track for weekly losses as increased recession fears have given investors pause, and the market has stalled out at some key technical levels following the strong rally since mid-October. All of the major indexes are lower, with the Dow Jones Industrial Average being the best relative performer but still falling 1.68% on the week. The S&P 500 has outperformed the Nasdaq Composite, but both are lower, having fallen 2.45% and 3.02%, respectively. Utilities is the only sector higher on the week, rising 0.44%. Meanwhile, Energy has lagged, falling 5.73%, as **investors appear unimpressed** by the G7 price cap on Russian oil.

As the Federal Reserve continues its balance sheet reduction program, excess reserve balances within the U.S. banking system are dwindling. While the central bank's aggressive rate hiking cycle has captured the majority of headlines, it is the movement in excess reserves within the U.S. banking system that appears to have impacted the direction of markets thus far this cycle. After ballooning in 2020 and 2021, excess bank reserves peaked at \$4.3 trillion back in early December 2021 and have fallen steadily throughout this year, to \$3.2 trillion today. When we plot these excess reserve numbers against the S&P 500, on a one-week lag, we can see that correlation between the two is very strongnearly 0.86 since the beginning of April 2020. Given the strong correlation, and the fact that the Fed's balance sheet projections indicate the reduction program should continue for the foreseeable future, we believe this relationship is worth keeping an eye on over the next several months and quarters, as it could represent a headwind for the equity market.



U.S. reserve balances are dwindling

* Correlation based on a 1-week lag Source - Bloomberg; data through 12/7/22 ■ Economic data have largely come in hotter than expected this week, fanning concerns that the Fed may have to continue its rate hiking cycle longer than currently anticipated, which could raise recession risks. The ISM Services Purchasing Managers' Index (PMI), which gauges the level of economic activity in non-manufacturing sectors, came in at 56.5, well above the consensus of 53.4, indicating business activity remains strong. Initial jobless claims came in at 230,000, up slightly from last week and in line with the Bloomberg consensus forecast, as the labor market continues to show surprising resilience.

CANADA

Sean Killin & Mila Krunic – Toronto

The Bank of Canada (BoC) raised its benchmark overnight interest rate by 50 basis points (bps) to a target rate of 4.25% this week, the latest step in its effort to curb inflationary pressures on the economy. This monetary policy action is larger than the 25 bps rate hike forecast by RBC Economics, and by financial markets via overnight index swaps. RBC Economics noted that the larger-than-expected increase could be due in part to the strong labour market data that has emerged since the BoC's last meeting in October. The central bank has raised its rate at seven consecutive meetings this year, accounting for a cumulative tightening of 400 bps. BoC Governor Tiff Macklem indicated that he is willing to pause and assess the situation now that the benchmark interest rate is four percentage points higher than it was at the start of the year. "Looking ahead, the governing council will be considering whether the policy interest rate needs to rise further," the statement said, opening the door to a pause as soon as the next meeting in January, in our view.

Canada is stepping up efforts to promote its national interests in its Indo-Pacific Strategy with a renewed focus on trade and foreign investment. The Canadian government's regional strategic report, released in November, proposes further restrictions on both indirect and direct foreign investment into the country. The decision is building out new powers for ministers to protect Canadian industry and strategic assets from foreign ownership and intervention. The federal government has already begun restricting investment in the critical minerals sector, particularly within the lithium and uranium spaces, as officials ordered three Chinese firms with state connections to divest from projects in early November. Recently enacted U.S. legislation, the Inflation Reduction Act of 2022, directs incentives towards purchasing battery technology from countries without human rights abuses; given these incentives, Canada's critical minerals sector is one of several where RBC's Multi-Asset Strategy team anticipates growth and investment in the long term.

EUROPE

Thomas McGarrity, CFA – London

■ **RBC Capital Markets expects the Bank of England** (**BoE**) to deliver a 50 basis point (bps) rate hike at the next Monetary Policy Committee (MPC) meeting on Dec. 15. We expect the BoE to continue raising rates in 2023, albeit at a slower pace, with a terminal rate of 4% in 2023, below current market pricing which sees a peak around 4.5%.

• The European Central Bank (ECB) is also likely to deliver a 50 bps hike at its Dec. 15 meeting, in our view. We expect interest rates to peak at 2.50% in 2023, which, again, is below current market pricing that sees the ECB increasing its interest rate to around 2.75%.

■ The euro area economy expanded by more than previously thought in Q3, according to Eurostat data, with GDP growing 0.3% q/q versus the initial estimate of 0.2%. Fixed capital investment drove the slightly betterthan-anticipated GDP performance, while households also contributed positively despite high inflation. Net trade was a large drag, weighing on overall output. Despite the better-than-expected Q3 GDP details, our base case remains a mild recession across Q4 2022 and Q1 2023 in the euro area.

■ The shares of pharmaceutical groups GSK and Sanofi were among the best-performing within the STOXX Europe 600 Index during the week. Their share prices gained 7.5% and 6%, respectively, on Wednesday following the judge ruling in their favour regarding Zantac product litigation in the federal Multi-District Litigation (MDL) in the U.S. The court determined that the plaintiffs' expert testimony and evidence was inadmissible in proving that ranitidine within Zantac increases the risk of cancer. The ruling only applies to the federal MDL, with state court cases ongoing in other jurisdictions, including California where the first bellwether trial related to Zantac product litigation is scheduled for February 2023.

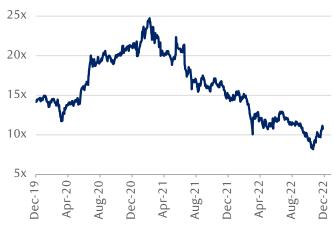
ASIA PACIFIC

Jasmine Duan – Hong Kong

Investors' sentiment on Chinese and Hong Kong equities has improved as China moves towards reopening. China's National Health Commission published 10 new measures to further loosen its COVID-19 control policies, covering quarantine requirements, close contact, vaccination, and treatment. Hong Kong equities rallied strongly on Thursday following a local media report that the Hong Kong government is also considering rolling back COVID restrictions. Hong Kong's benchmark Hang Seng Index surged by 3.4% and the Hang Seng Tech Index rallied by 6.6% for the day.

China equities have recovered, but valuations remain relatively low

MSCI China Index price-to-earnings ratio



Source - RBC Wealth Management, Bloomberg; data through 12/7/22

We believe a confirmed path towards reopening paves the way for earnings improvement and a valuation rerating for Chinese equities. However, the path will be bumpy, in our view, with the reopening likely to be a "two steps forward, one step back" process as it will take some time for the government, citizens, and health care system to figure out a way to "live with COVID."

■ Besides, a recovery in consumption could take a while to play out, in our opinion. As new cases surge, many people may be hesitant to go out. We believe offline shopping and dining out at restaurants could see a slower pickup, while online retail, telemedicine, and food delivery demand could see stronger momentum—similar to what we observed at the beginning of the pandemic.

■ Japan's GDP was down an annualized 0.8% from July to September, a smaller decline than the early official estimate for a contraction of 1.2%, and better than economists' consensus forecast of -1.0%. The revised figures showed that slightly stronger exports reduced the negative impact on trade from yen depreciation. Moreover, companies have been increasing their inventories and spending, which should be positive for future GDP growth. However, consumption was dampened by inflation and a surge in COVID cases. Overall, while the data are slightly better than expected, we don't think they are strong enough to eliminate investors' concerns about the recovery of the economy.

MARKET Scorecard

Data as of December 7, 2022

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 0.73 means 1 Canadian dollar will buy 0.73 U.S. dollar. CAD/USD -7.4% return means the Canadian dollar fell 7.4% vs. the U.S. dollar year to date. USD/JPY 136.55 means 1 U.S. dollar will buy 136.55 yen. USD/JPY 18.7% return means the U.S. dollar rose 18.7% vs. the yen year to date.

Source - Bloomberg; data as of 12/7/22

Equities (local currency)	Level	MTD	YTD	1 yr	2 yr
S&P 500	3,933.92	-3.6%	-17.5%	-16.1%	6.6%
Dow Industrials (DJIA)	33,597.92	-2.9%	-7.5%	-5.9%	11.7%
Nasdaq	10,958.55	-4.4%	-30.0%	-30.1%	-12.5%
Russell 2000	1,806.90	-4.2%	-19.5%	-19.8%	-4.5%
S&P/TSX Comp	19,973.22	-2.3%	-5.9%	-5.6%	13.6%
FTSE All-Share	4,093.68	-1.1%	-2.7%	-2.0%	10.8%
STOXX Europe 600	436.20	-0.9%	-10.6%	-9.2%	11.0%
EURO STOXX 50	3,920.90	-1.1%	-8.8%	-8.3%	11.1%
Hang Seng	18,814.82	1.2%	-19.6%	-21.6%	-29.0%
Shanghai Comp	3,199.62	1.5%	-12.1%	-11.0%	-6.4%
Nikkei 225	27,686.40	-1.0%	-3.8%	-2.7%	4.3%
India Sensex	62,410.68	-1.1%	7.1%	8.3%	37.4%
Singapore Straits Times	3,225.45	-2.0%	3.3%	2.9%	14.2%
Brazil Ibovespa	109,068.55	-3.0%	4.1%	1.4%	-4.0%
Mexican Bolsa IPC	50,725.96	-1.9%	-4.8%	-0.4%	17.3%
Gov't bonds (bps change)	Yield	MTD	YTD	1 yr	2 уг
U.S. 10-Yr Treasury	3.415%	-19.0	190.5	194.2	249.2
Canada 10-Yr	2.757%	-18.1	133.1	117.5	199.3
UK 10-Yr	3.044%	-11.7	207.3	231.4	276.1
Germany 10-Yr	1.782%	-14.8	195.9	215.7	236.4
Fixed income (returns)	Yield	MTD	YTD	1 уг	2 yr
U.S. Aggregate	4.48%	0.9%	-11.8%	-11.9%	-12.8%
U.S. Investment-Grade Corp	5.18%	1.5%	-14.2%	-14.3%	-14.5%
U.S. High-Yield Corp	8.60%	0.4%	-10.3%	-9.7%	-4.6%
Commodities (USD)	Price	MTD	YTD	1 yr	2 yr
Gold (spot \$/oz)	1,786.42	1.0%	-2.3%	0.1%	-4.1%
Silver (spot \$/oz)	22.73	2.4%	-2.5%	1.0%	-7.2%
Copper (\$/metric ton)	8,384.75	1.9%	-13.9%	-12.8%	9.0%
Oil (WTI spot/bbl)	72.01	-10.6%	-6.5%	-0.1%	57.4%
Oil (Brent spot/bbl)	77.53	-9.2%	-0.3%	2.8%	58.9%
Natural Gas (\$/mmBtu)	5.80	-16.3%	55.5%	56.4%	141.0%
Currencies	Rate	MTD	YTD	1 yr	2 yr
U.S. Dollar Index	105.1790	-0.7%	9.9%	9.1%	15.8%
CAD/USD	0.7324	-1.8%	-7.4%	-7.4%	-6.2%
USD/CAD	1.3654	1.8%	8.0%	8.0%	6.7%
EUR/USD	1.0508	1.0%	-7.6%	-6.7%	-13.2%
GBP/USD	1.2210	1.3%	-9.8%	-7.8%	-8.7%
AUD/USD	0.6726	-0.9%	-7.4%	-5.5%	-9.4%
USD/JPY	136.5500	-1.1%	18.7%	20.2%	31.2%
EUR/JPY	143.4900	-0.1%	9.6%	12.1%	13.9%
EUR/GBP	0.8606	-0.3%	2.3%	1.2%	-4.9%
EUR/CHF	0.9886	0.5%	-4.7%	-5.1%	-8.3%
USD/SGD	1.3553	-0.4%	0.5%	-0.8%	1.4%
USD/CNY	6.9700	-1.7%	9.7%	9.5%	6.7%
USD/MXN	19.6680	2.1%	-4.2%	-6.5%	-1.1%
USD/BRL	5.2164	0.5%	-6.4%	-7.0%	2.1%

Authors

Jasmine Duan – Hong Kong, China

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

Tyler Frawley, CFA – Minneapolis, United States

tyler.frawley@rbc.com; RBC Capital Markets, LLC

Sean Killin – Toronto, Canada

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

Mila Krunic – Toronto, Canada mila.krunic@rbc.com; RBC Capital Markets, LLC

Thomas McGarrity, CFA – London, United Kingdom

thomas.mcgarrity@rbc.com; RBC Europe Limited

Disclosures and Disclaimer

Analyst Certification

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

Important Disclosures

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

Non-U.S. Analyst Disclosure

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 <u>https://www.rbccm.com/GLDisclosure/PublicWeb/</u> <u>DisclosureLookup.aspx?EntityID=2</u> to view disclosures regarding RBC Wealth Management and its affiliated firms. Such information is also available upon request to RBC Wealth Management Publishing, 250 Nicollet Mall, Suite 1800, Minneapolis, MN 55401-1931.

RBC Capital Markets 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 RBC Capital Markets ratings are determined on a relative basis.

Distribution of ratings – RBC Capital Markets Equity Research

As of September 30, 2022

			Investment Banking Services Provided During Past 12 Months	
Rating	Count	Percent	Count	Percent
Buy [Outperform]	844	57.18	260	30.81
Hold [Sector Perform]	580	39.30	161	27.76
Sell [Underperform]	52	3.52	5	9.62

Explanation of RBC Capital Markets 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 RBC Capital Markets' 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 Capital Markets 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, and its affiliates, a portion of which are or have been generated by investment banking activities of RBC Capital Markets 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 <u>https://www.rbccm.com/GLDisclosure/</u> <u>PublicWeb/DisclosureLookup.aspx?EntityID=2.</u> 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

