GLOBAL
Insight
WEEKLY

Wealth Management
RBC

Perspectives from the Global Portfolio Advisory Committee August 13, 2026

Sector ETFs vs. benchmark indexes: How RIC rules shape your investments

Matt Heerey, CIMA® – Minneapolis

Sector ETFs and benchmark indexes try to track the same thing, an economic sector, yet differences in regulatory frameworks complicate the comparisons.

When you invest in sector-focused products, you might assume that a sector exchange-traded fund (ETF) and its underlying benchmark index are essentially the same thing. After all, both are designed to track the performance of a specific economic sector. However, this assumption can be misleading. While sector ETFs and sector benchmark indexes are closely related, they operate under fundamentally different constraints, most notably the regulated investment company (RIC) rules. Understanding this difference is critical for investors who want to know what they're actually holding in their ETF and how it might perform relative to their expectations.

What are sector ETFs and benchmark indexes?

Sector benchmark indexes, such as the S&P 500 Communication Services Index or the S&P 500 Information Technology Index, are theoretical constructs. They represent the companies within a particular sector and can be used to gauge returns and risk. Benchmark indexes are not tradable; rather, they are proxies for market segments and act as reference points to measure how a specific sector is performing.

A sector ETF, by contrast, is a real investment product. These ETFs are bought and sold on stock exchanges and aim to replicate the performance of their underlying sector benchmark index.

The RIC rules: Tax efficiency meets portfolio constraints

Most ETFs, including sector-focused ones, elect to be treated as RICs for tax purposes. This designation is important because it allows ETFs to operate as pass-through entities, distributing income and capital gains directly to shareholders without paying tax at the fund level. This structure is one of the reasons ETFs are tax-efficient for investors—it eliminates double taxation.

However, to qualify and maintain RIC status, ETFs must satisfy strict regulatory requirements, including diversification tests known as the 25/5/50 rule. These tests are assessed at the close of each quarter and include:

- **The 25 percent cap:** No more than 25 percent of total assets can be concentrated in a single issue (excluding government securities or other RICs).
- **The 5 percent/50 percent test:** Positions exceeding 5 percent cannot collectively represent more than 50 percent of the fund's total assets.

Sector benchmark indexes have no such constraints. They can hold whatever concentration levels the index provider deems appropriate based on market data and sector composition. This distinction has real consequences for how sector ETFs are built and how closely they

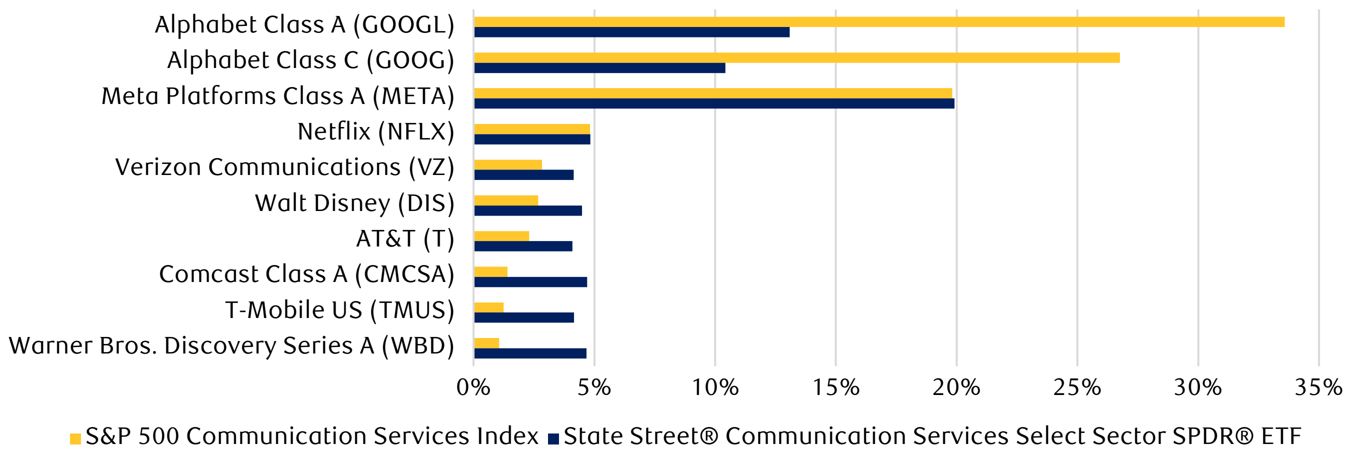
For perspectives on the week from our regional analysts, please see pages 3–4.

For important disclosures, required non-U.S. analyst disclosures, and authors' contact information, see page 6.

Priced (in USD) as of 8/12/26 market close (unless otherwise stated). Produced: 8/13/26, 16:35 ET; Disseminated: 8/13/26, 16:45 ET

Regulated investment company rules cap the ETF's top holdings, altering the fund's makeup vs. sector index

Top index holdings vs. sector ETF



Source - RBC Wealth Management, FactSet; data as of 6/30/26

track sector benchmarks. To manage this constraint while maintaining RIC status, ETF providers may adjust holdings to stay within regulatory limits, which may mean underweighting the largest companies in the sector.

The chart above illustrates this dynamic by comparing the top 10 companies in the S&P 500 Communication Services benchmark against the holdings of the State Street® Communication Services Select Sector SPDR® ETF, and we can see meaningful weighting differences. Most notably, the combined weight of Alphabet's Class A and Class C shares (treated as a single issuer) is the largest index holding at 60 percent and is significantly underweighted in the ETF at only 23.5 percent. This adjustment keeps the ETF within the RIC diversification requirements while the index faces no such constraint. Smaller positions, such as Verizon and Walt Disney Company, show corresponding overweight allocations within the ETF, demonstrating how RIC compliance can reshape the portfolio.

Performance implications

These regulatory adjustments can create a tracking difference, or the performance gap between the ETF and its target benchmark. In most cases, this tracking difference is small. However, in concentrated sectors or during periods of significant market movements, the difference can become material.

For instance, if a sector experiences a sharp rally driven primarily by its largest company, the sector ETF constrained by RIC rules might capture less of that gain than the benchmark index. Conversely, if that same company declines sharply, the ETF might suffer less than the benchmark since it was already underweighting that position.

The table demonstrates this principle in real market conditions. Over the first half of 2026, the State Street® Communication Services Select Sector SPDR® ETF underperformed the S&P 500 Communication Services benchmark by 9 percent year to date. This underperformance occurred because the index's top holding, Alphabet, outperformed the broader sector during this period. By maintaining significantly lower weight to this company due to RIC diversification requirements, the ETF couldn't fully capture gains from the position. While this represents an unfavorable outcome for ETF investors in this particular cycle, it underscores an important reality: RIC constraints don't always hurt performance, but they do create meaningful deviations from the pure index composition.

Many sector benchmark indexes are designed by providers with RIC considerations in mind. Index methodologies often include concentration limits to ensure that the theoretical index itself remains within reasonable boundaries for ETF tracking. This approach minimizes the gap between the index and compliant ETF products.

The regulatory framework underlying ETFs isn't glamorous, but it is an essential infrastructure that protects tax efficiency while maintaining market integrity. Understanding how RIC rules shape your sector ETF investments gives you a deeper, more informed perspective on what you own and how it might diverge from market benchmarks.

Performance gaps can emerge in concentrated sectors when large positions are on the move

	3M	YTD	1Y	3Y
State Street® Communication Services Select Sector SPDR® ETF	-3.1%	-8.4%	0.0%	19.4%
S&P 500 Communication Services Index	8.3%	0.8%	21.1%	29.2%
Tracking difference	**-11.4%**	**-9.2%**	**-21.1%**	**-9.8%**

Source - RBC Wealth Management, Morningstar; returns as of 6/30/26

UNITED STATES

Phil d'Entremont, CFA – Minneapolis

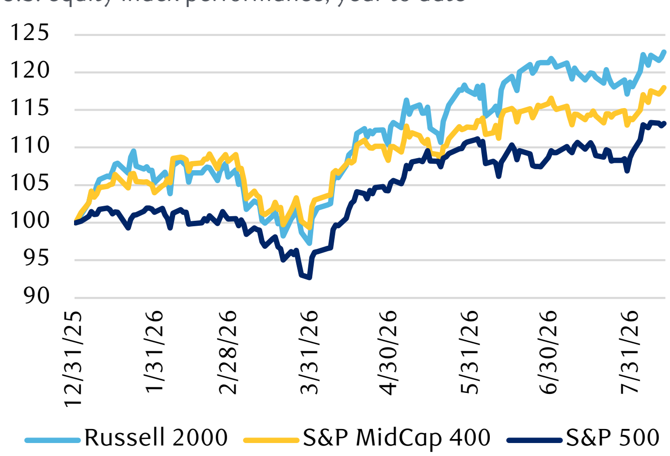
- **The U.S. equity market is hitting all-time highs.** The S&P 500 closed at 7,757 on August 7, with the market hovering near all-time highs week to date. What is more interesting, in our view, is the broad participation of the U.S. equity market. The S&P MidCap 400 and the small-cap Russell 2000 indexes posted all-time highs at the close of August 12, with their 2026 year-to-date returns outpacing the large-cap S&P 500.

- **The AI theme is still intact.** These all-time highs come as U.S. stocks emerge from their earnings season, a quarterly update that can serve as a market test to see if companies are making the grade. After a strong start to 2026 for semiconductors and tech hardware companies, investors have focused on spending in computing power investments. While most large companies have already reported, this week we saw earnings from a few AI-related stocks, namely Super Micro Computer, CoreWeave, and Nebius. These stocks rallied 19%, 19%, and 34%, respectively, after earnings and forward guidance were released, as concerns about the durability and return on AI capital investments have eased for the time being.

- **Rates remain elevated as July CPI matches expectations.** U.S. interest rates remain at the high end of their 2026 range, with the 10-year Treasury closing at 4.69% on Wednesday. A handful of items have driven this dynamic, including elevated energy costs resulting from the muted Strait of Hormuz shipping traffic. This week we also received the July CPI report, which saw core inflation (excluding food and energy) rising 0.2% m/m, a level roughly consistent on an annualized basis with the Fed's 2% target. RBC Wealth Management Fixed Income Senior Portfolio Strategist Tom Garretson noted that this CPI release has seemingly reduced near-term pressure on the Fed to act, with the likelihood of a rate hike at the September Fed meeting dropping to approximately 35% at the time of this writing from 50% before the CPI release.

Small-cap stocks lead U.S. performance in 2026

U.S. equity index performance, year to date



Source - RBC Wealth Management, Standard & Poor's, FTSE Russell, FactSet; data through 8/12/26, indexed to 100 on 12/31/25

CANADA

Nguyen Dang, CFA & Claudia Humbert, CFA – Toronto

- **The Canadian labour market added 75,100 jobs in July, beating Bloomberg consensus expectations for a gain of 20,000.** Employment gains were almost evenly split between full- and part-time positions, while the unemployment rate declined for a third straight month to 6.4%, its lowest level in two years. The improvement in unemployment came even as more Canadians entered the job market, suggesting the decline reflected stronger hiring rather than fewer people looking for work. Though the unemployment rate remains elevated by historical standards, RBC Economics expects it to continue edging lower through the remainder of the year. Total hours worked also rose 0.6% m/m, pointing to a pickup in economic activity following a soft start to the year. However, wage growth continued to cool, expanding 2.8% y/y in July compared to 3.3% y/y in June. In our view, the combination of improving jobs numbers and easing wage pressure—despite ongoing trade uncertainty and geopolitically driven oil price volatility—supports the Bank of Canada remaining patient with monetary policy.

- **Canada's private sector showed tentative signs of stabilization in July**, although conditions remained uneven across industries. The S&P Global Canada Services Purchasing Managers' Index (PMI) rose to 49.1 from 47.1 in June, indicating a slower pace of contraction but a second consecutive monthly decline in activity (below 50 indicates contraction, above 50 expansion). New business volumes remained under pressure, including a sharper fall in export demand, as economic uncertainty—tied to tariffs and geopolitical risks—weighed on spending and confidence. Cost pressures also remained elevated, reflecting higher energy, fuel, and wage expenses, while firms increased staffing modestly. Encouragingly, manufacturing remained a clear bright spot, with the S&P Global Canada Manufacturing PMI climbing to 53.5 from 53.0 and marking a fourth straight month of expansion, supported by firmer domestic demand, stronger output, and new orders. Manufacturers also added workers, although weak exports, rising input costs, and softer business confidence highlighted ongoing risks. Collectively, the S&P Global Canada Composite PMI, representing the services and manufacturing segments, improved to 49.7 from 47.9, suggesting to us the economy moved closer to stabilization. However, services weakness continues to temper the more constructive manufacturing backdrop and still warrants some near-term caution.

UK & EUROPE

Thomas McGarrity, CFA – London

- **Europe is closing out its strongest earnings season in several years,** in our view. Earnings delivery has been strong, with a higher proportion of companies beating consensus expectations than typical, despite the raised bar heading into the season from rising markets and estimates. More importantly, though, earnings strength has been broad-based, and consensus earnings estimates for the region have continued to move higher.

- **Earnings per share (EPS) for the STOXX Europe 600 Index grew 23% y/y in Q2,** albeit with a hefty contribution from the rise in Energy sector earnings. Stripping out Energy, EPS rose 13% y/y. This earnings strength comes despite the renewed energy supply shock and higher oil and gas prices, which historically have been a headwind for European earnings. Consensus earnings estimates now call for 15% y/y growth in 2026, and 9% y/y in 2027.

- **Beyond commodity-driven strength, we see several other noteworthy factors supporting European earnings growth. First, helpful year-over-year base effects;** 12 to 18 months ago, the strength of the euro versus the U.S. dollar was a significant headwind to the aggregate earnings growth coming out of the region given that around 55% of revenues derive from outside Europe. **Second, the European economy has shown resilience.** The Citi Economic Surprise Index for the eurozone has risen sharply over the past two months and is now at two-year highs, which has been supported by several macroeconomic indicators coming in better than consensus expectations, including a nice rebound in eurozone Purchasing Managers' Indexes, while stronger loan growth has also been a clear tailwind for the European economy.

- **Third, the region's banking industry continues to see earnings upgrades** as revenues grow faster than operating costs—the "positive jaws" effect—while credit quality remains solid. **Fourth, the global AI infrastructure buildout,** especially in the U.S., is supporting accelerating earnings growth and upwardly revised guidance from several of Europe's globally leading Semiconductor and Capital Goods firms. **Fifth, the aerospace and defence industry continues to deliver strong earnings growth,** including limited signs of elevated aircraft retirements or reduced flight activities despite higher jet fuel prices continuing to support the civil aerospace aftermarket players.

- The significantly improved earnings picture is a key reason **we maintain a constructive outlook on European equities.**

ASIA-PACIFIC

Jasmine Duan – Hong Kong

- **Asian equities staged a stable recovery** as benign U.S. inflation data eased concerns about imminent Federal Reserve rate hikes. The MSCI Asia Pacific Index rose to its highest level since early July. **South Korea's benchmark KOSPI Index delivered the strongest turnaround in the region, surging 8.6% during the week.** The index has rallied 22% from its July low, entering technical bull market territory. Beyond the speculative positions being unwound, valuations have become more attractive, in our assessment, and we think the rally reflects investor confidence that AI spending momentum will be sustained, as hyperscalers' latest earnings results demonstrate continued capital commitments to data center buildouts and infrastructure.

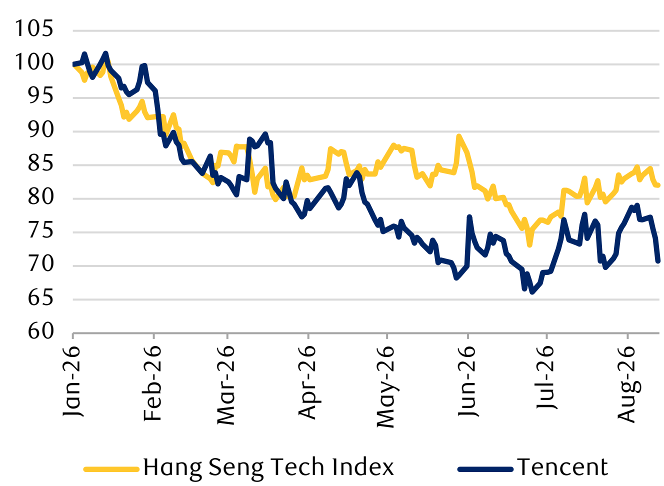
- **The Bank of Korea (BOK) made its first gold-related investment in over a decade,** purchasing roughly US$250 million worth of gold exchange-traded fund (ETF) shares in Q2. We think the central bank's move could indicate potential for further gold accumulation, as the precious metal only accounts for roughly 1% of South Korea's total reserves. By investing through ETFs rather than physical bullion, the central bank can gain exposure to gold while maintaining liquidity and trading flexibility, in our view.

- **South Korea recently also announced plans to establish a framework for purchasing domestically refined gold,** marking its first such initiative in nearly six decades and underscoring its commitment to gradually expanding gold's role within its foreign-exchange reserves.

- **Chinese Internet giant Tencent (700 HK) saw its share price decline 4.5% on Thursday following a 176% increase in AI investment** to US$7.8 billion in the June quarter. Management highlighted progress with the Hunyuan foundation model, WorkBuddy office tool, and Xiaowei—the latter is an agentic AI embedded within WeChat. However, investors seem skeptical about the returns on investment. We think the company's core business fundamentals and current valuation (FY2026 price-to-earnings ratio of 13.3x based on consensus estimates) suggest much of the near-term AI capital expenditure headwinds may already be reflected in the share price.

Tencent's increased AI investment is raising concerns

Tencent's share price has lagged the performance of the Hang Seng Tech Index this year



Source - RBC Wealth Management, Bloomberg; data through 8/13/26, indexed to 100 on 1/2/26

MARKET

Scorecard

Equities (local currency)	Level	MTD	YTD	1 yr	2 yr
S&P 500	7,748.50	3.5%	13.2%	20.2%	45.0%
Dow Industrials (DJIA)	53,770.27	2.4%	11.9%	20.9%	36.6%
Nasdaq	26,588.49	4.8%	14.4%	22.6%	58.4%
Russell 2000	3,045.48	3.9%	22.7%	33.4%	47.7%
S&P/TSX Comp	36,662.14	4.1%	15.6%	31.3%	63.7%
FTSE All-Share	5,843.10	0.1%	9.2%	17.8%	30.2%
STOXX Europe 600	659.48	1.6%	11.4%	20.4%	32.1%
EURO STOXX 50	6,533.99	2.8%	12.8%	22.5%	39.9%
Hang Seng	25,440.17	-1.7%	-0.7%	1.9%	48.7%
Shanghai Comp	3,946.68	3.0%	-0.6%	7.7%	38.1%
Nikkei 225	67,524.06	4.9%	34.1%	58.1%	92.8%
India Sensex	77,966.35	-0.2%	-8.5%	-2.8%	-2.1%
Singapore Straits Times	5,720.75	1.6%	23.1%	35.5%	76.8%
Brazil Ibovespa	167,491.07	-5.9%	4.0%	21.4%	27.7%
Mexican Bolsa IPC	65,722.55	-1.8%	2.2%	12.0%	23.9%
Gov't bonds (bps change)	**Yield**	**MTD**	**YTD**	**1 yr**	**2 yr**
U.S. 10-Yr Treasury	4.688%	-4.6	52.1	40.0	78.5
Canada 10-Yr	3.691%	2.7	25.8	25.7	60.7
UK 10-Yr	4.970%	-8.0	49.1	34.4	105.4
Germany 10-Yr	3.160%	-4.6	30.5	41.6	93.4
Fixed income (returns)	**Yield**	**MTD**	**YTD**	**1 yr**	**2 yr**
U.S. Aggregate	4.95%	0.3%	-0.3%	2.4%	5.5%
U.S. Investment-Grade Corp	5.44%	0.3%	-0.5%	2.2%	6.8%
U.S. High-Yield Corp	7.26%	0.6%	2.4%	5.5%	15.0%
Commodities (USD)	**Price**	**MTD**	**YTD**	**1 yr**	**2 yr**
Gold (spot $/oz)	4,407.25	8.9%	2.0%	31.6%	78.2%
Silver (spot $/oz)	65.24	13.3%	-9.0%	72.1%	133.2%
Copper ($/metric ton)	14,352.36	3.7%	15.2%	47.2%	61.1%
Oil (WTI spot $/bbl)	82.84	-2.2%	44.3%	31.1%	3.5%
Oil (Brent spot $/bbl)	88.61	-1.7%	45.6%	34.0%	7.7%
Natural Gas ($/mmBtu)	2.80	1.8%	-24.1%	-0.4%	27.8%
Currencies	**Rate**	**MTD**	**YTD**	**1 yr**	**2 yr**
U.S. Dollar Index	100.0000	0.1%	1.7%	1.9%	-3.0%
CAD/USD	0.7172	0.6%	-1.6%	-1.2%	-1.4%
USD/CAD	1.3943	-0.6%	1.6%	1.2%	1.4%
EUR/USD	1.1523	0.0%	-1.9%	-1.3%	5.4%
GBP/USD	1.3492	0.1%	0.1%	-0.1%	5.7%
AUD/USD	0.7061	0.6%	5.8%	8.1%	7.2%
USD/JPY	159.4600	1.3%	1.8%	7.9%	8.3%
EUR/JPY	183.7500	1.3%	-0.1%	6.5%	14.2%
EUR/GBP	0.8541	-0.1%	-2.0%	-1.2%	-0.3%
EUR/CHF	0.9378	0.8%	0.8%	-0.4%	-0.8%
USD/SGD	1.2805	-0.2%	-0.4%	-0.2%	-3.3%
USD/CNY	6.7449	-0.1%	-3.5%	-6.1%	-6.0%
USD/MXN	17.0573	-1.6%	-5.3%	-8.3%	-10.6%
USD/BRL	5.1758	2.0%	-5.5%	-4.0%	-5.8%

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 Tuesday'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 0.71 means 1 Canadian dollar will buy 0.71 U.S. dollar. CAD/USD -1.6% return means the Canadian dollar has fallen 1.6% vs. the U.S. dollar year to date. USD/JPY 159.46 means 1 U.S. dollar will buy 159.46 yen. USD/JPY 1.8% return means the U.S. dollar has risen 1.8% vs. the yen year to date.

Source - Bloomberg; data as of 8/12/26

Authors

Nguyen Dang, CFA – Toronto, Canada
nguyen.dang@rbc.com; RBC Dominion Securities Inc.

Phil d'Entremont, CFA – Minneapolis, United States
phil.dentremont@rbc.com; RBC Capital Markets, LLC

Jasmine Duan – Hong Kong, China
jasmine.duan@rbc.com; Royal Bank of Canada, Hong Kong Branch

Matt Heerey, CIMA® – Minneapolis, United States
matt.heerey@rbc.com; RBC Capital Markets, LLC

Claudia Humbert, CFA – Toronto, Canada
claudia.humbert@rbc.com; RBC Dominion Securities Inc.

Thomas McGarrity, CFA – London, United Kingdom
thomas.mcgarrity@rbc.com; RBC Europe Limited

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 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, 250 Nicollet Mall, Suite 1800, Minneapolis, MN 55401-1931.

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). 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. As of April 3, 2023, U.S. RBC Wealth Management's quarterly reports will serve as the primary communication for its models and will highlight any changes to the model made during the quarter.

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 June 30, 2026

			Investment Banking Services Provided During Past 12 Months	
Rating	Count	Percent	Count	Percent
Buy [Outperform]	927	57.94	290	31.28
Hold [Sector Perform]	626	39.12	161	25.72
Sell [Underperform]	47	2.94	3	6.38

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.

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 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; RBC Dominion Securities Inc., a securities broker-dealer with principal offices located in Toronto, Canada; Royal Bank of Canada, Hong Kong Branch which is regulated by the Hong Kong Monetary Authority and the Securities and Futures Commission ("SFC"); Royal Bank of Canada, Singapore Branch, a licensed wholesale bank with its principal office located in Singapore; and 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

RBC® Wealth Management