# Subject to Completion Draft Pricing Supplement Dated March 15, 2022

Pricing Supplement to Short Form Base Shelf Prospectus dated February 27, 2020, the Prospectus Supplement thereto dated February 27, 2020 and the Prospectus Supplement thereto dated February 27, 2020

No securities regulatory authority has expressed an opinion about these securities and it is an offence to claim otherwise.

This pricing supplement together with the short form base shelf prospectus dated February 27, 2020, the prospectus supplement dated February 27, 2020 and the prospectus supplement dated February 27, 2020, to which it relates, as amended or supplemented, and each document incorporated by reference into such prospectus, constitutes a public offering of these securities only in those jurisdictions where they may be lawfully offered for sale and therein only by persons permitted to sell such securities.

The securities to be issued hereunder have not been, and will not be, registered under the United States Securities Act of 1933, as amended and, subject to certain exceptions, may not be offered, sold or delivered, directly or indirectly, in the United States of America or for the account or benefit of U.S. persons.



Royal Bank of Canada
Senior Note Program
Index Linked Securities
Maximum \$20,000,000 (200,000 Securities)
RBC Lesser of Index Callable Yield 5.00% Securities (CAD), Series 542
Due March 30, 2027
Non-Principal Protected Securities

Royal Bank of Canada (the "Bank") is offering up to \$20,000,000 of RBC Lesser of Index Callable Yield 5.00% Securities (CAD), Series 542 (which we refer to as the "Securities" for the purpose of this pricing supplement only and not for the purpose of the "base shelf prospectus" as defined below), designed for investors who are prepared and can afford to take the risk that they will lose substantially all of their investment, that regular Interest Payments (defined herein) will not be made on the Securities, and that the Securities will be redeemed early, because they believe that the Closing Level (defined herein) of each of the S&P 500® Index and the S&P/TSX 60 Index (the "Indices" and each, an "Index") will be greater than or equal to the Coupon Barrier Level (defined herein) but less than the Autocall Redemption Level (defined herein) on each Observation Date (defined herein) and that the Final Index Level (defined herein). Payment at maturity (if no early redemption has occurred) will be greater than or equal to its Protection Barrier Level (defined herein). Payment at maturity (if no early redemption has occurred) will be based on the price performance of one of the Indices, whichever has the lowest ratio of Final Index Level to Initial Index Level (defined herein) (the "Worst Performing Index"). Holders of the Securities will also receive Interest Payments payable quarterly on each Interest Payment Date (defined herein) each at a fixed amount of \$1.25 per Security if there is a Digital Payout Event (defined herein) on the immediately preceding Observation Date. The return on the Securities is limited; even if a Digital Payout Event occurs on each Observation Date, the Securities are not redeemed prior to maturity and the Final Index Level of the Worst Performing Index is greater than or equal to its Protection Barrier Level, the maximum return on the Securities would be equal to \$25.00 per Security.

The initial estimated value of the Securities as of March 10, 2022 was \$91.57 per Security, which is less than the price to the public and is not an indication of the actual profit to the Bank or its affiliates. The actual value of the Securities at any time will reflect many factors, cannot be predicted with accuracy, and may be less than this amount. We describe our determination of the initial estimated value in more detail below. See "Risk Factors" and "Preparation of Initial Estimated Value".

The Securities are described in this pricing supplement delivered together with our short form base shelf prospectus dated February 27, 2020 (the "base shelf prospectus"), the prospectus supplement establishing our Senior Note Program dated February 27, 2020 (the "program supplement") and a prospectus supplement which generally describes index linked securities that we may offer under our Senior Note Program dated February 27, 2020 (the "product supplement").

The Securities are not fixed income securities and are not designed to be alternatives to fixed income or money market instruments. The Securities are structured products that possess downside risk.

The Securities will not constitute deposits insured under the Canada Deposit Insurance Corporation Act.

The Bank has determined that the Securities are not subject to withholding tax under Section 871(m) of the U.S. Internal Revenue Code.

An investment in the Securities involves risks. An investment in the Securities is not the same as a direct investment in the securities that comprise the indices to which the Securities are linked and investors have no rights with respect to the securities underlying any such index. The Securities are considered to be "specified derivatives" under applicable Canadian securities laws. If you purchase Securities, you will be exposed to changes in the level of the Indices and fluctuations in interest rates, among other factors. Index levels are volatile and an investment in the Securities may be considered to be speculative. Since the Securities are not principal protected and the Principal Amount (defined herein) will be at risk, you could lose substantially all of your investment. See "Risk Factors".

[**1**], 2022

	Price: \$	100 per Security	
	Minimum Subscrip	tion: \$5,000 (50 Securities)	
	Price to public	Selling Commissions and Dealer's fee <sup>(1)</sup>	Net proceeds to the Bank
Per Security	\$100.00	\$2.50	\$97.50
Total <sup>(2)</sup>	\$20,000,000	\$500,000	\$19,500,000

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- (1) A commission of 2.50% of the Principal Amount of Securities issued under this offering will be paid to the Dealers (defined below) for further payment to representatives, including representatives employed by the Dealers, whose clients purchase the Securities. An agency fee will also be paid, from the Bank's own funds, to Laurentian Bank Securities Inc. in an amount up to 0.15% of the Principal Amount of the Securities issued under this offering for acting as independent agent.
- (2) Reflects the maximum offering size of the Securities. There is no minimum amount of funds that must be raised under this offering. This means that the issuer could complete this offering after raising only a small proportion of the offering amount set out above.

The Securities are offered severally by RBC Dominion Securities Inc. ("RBC DS") and Laurentian Bank Securities Inc. (collectively, the "Dealers") as agents under a dealer agreement dated February 27, 2020, as amended or supplemented from time to time. RBC DS is our wholly owned subsidiary. Consequently, we are a related and connected issuer of RBC DS within the meaning of applicable securities legislation. See "Dealers" in this pricing supplement and "Plan of Distribution" in the program supplement.

The Securities will not be listed on any stock exchange. Securities may be resold using the Fundserv network at a price determined at the time of sale by the Calculation Agent (defined herein), which price may be lower than the Principal Amount of such Securities. The Securities will also be subject to specified early trading charges, depending on when the Securities are sold. There is no assurance that a secondary market for the Securities will develop or be sustained. See "Secondary Market for Securities", "Description of the Securities—Calculation Agent" and "Risk Factors" in the program supplement and "Secondary Market" in this pricing supplement.

#### **Prospectus for Securities**

Securities described in this pricing supplement will be issued under our Senior Note Program and will be unsecured, unsubordinated debt obligations. The Securities are Senior Debt Securities (as defined in the base shelf prospectus referred to below) and are described in four separate documents: (1) the base shelf prospectus, (2) the program supplement, (3) the product supplement, and (4) this pricing supplement, all of which collectively constitute the "prospectus" for the Securities. See "Prospectus for Securities" in the program supplement.

#### **Documents Incorporated by Reference**

This pricing supplement is deemed to be incorporated by reference into the base shelf prospectus solely for the purpose of our Senior Note Program and the Securities issued hereunder. Other documents are also incorporated or deemed to be incorporated by reference into the base shelf prospectus and reference should be made to the base shelf prospectus for full particulars.

## **Marketing Materials**

The version of the summary for the Securities that was filed with the securities commissions or similar regulatory authorities in each of the provinces and territories of Canada as "marketing materials" (as defined in National Instrument 41-101 – General Prospectus Requirements) on March 15, 2022 is deemed to be incorporated by reference into the base shelf prospectus solely for the purpose of our Senior Note Program and the Securities issued hereunder. Any version of marketing materials filed with the securities commission or similar regulatory authority in each of the provinces and territories of Canada in connection with this offering after the date hereof but prior to the termination of the distribution of the Securities under this pricing supplement (including any amendments to, or an amended version of, the marketing materials) is deemed to be incorporated by reference herein and in the base shelf prospectus solely for the purpose of our Senior Note Program and the Securities issued hereunder. Any such marketing materials are not part of this pricing supplement or the base shelf prospectus to the extent that the contents of the marketing materials have been modified or superseded by a statement contained in an amendment to this pricing supplement.

#### **Caution Regarding Forward-Looking Statements**

From time to time, we make written or oral forward-looking statements within the meaning of certain securities laws, including the "safe harbour" provisions of the United States Private Securities Litigation Reform Act of 1995 and any applicable Canadian securities legislation. We may make forward-looking statements in the base shelf prospectus and in the documents incorporated by reference therein, in the program supplement, in the product supplement, in this pricing supplement, in other filings with Canadian regulators or the United States Securities and Exchange Commission, in other reports to shareholders, and in other communications. Forward-looking statements in, or incorporated by reference in, this prospectus include, but are not limited to, statements relating to our financial performance objectives, vision and strategic goals, the Economic, market and regulatory review and outlook section of our management's discussion and analysis for the three month period ended January 31, 2022 (the "Q1 2022 Management's Discussion and Analysis") and in the Economic, market and regulatory review and outlook section of our management's discussion and analysis for the year ended October 31, 2021 (the "2021 Management's Discussion and Analysis") for Canadian, U.S., European and global economies, the regulatory environment in which we operate, and the risk environment including our credit risk, market risk, liquidity and funding risk, and the potential continued impacts of the coronavirus (COVID-19) pandemic on our business operations, financial results, condition and objectives and on the global economy and financial market conditions and includes our President and Chief Executive Officer's statements. The forward-looking information contained in, or incorporated by reference in, this prospectus is presented for the purpose of assisting the holders of our securities and financial analysts in understanding our financial position and results of operations as at and for the periods ended on the dates presented, as well as our financial performance objectives, vision and strategic goals, and may not be appropriate for other purposes. Forward-looking statements are typically identified by words such as "believe", "expect", "foresee", "forecast", "anticipate", "intend", "estimate", "goal", "plan" and "project" and similar expressions of future or conditional verbs such as "will", "may", "should", "could" or "would".

By their very nature, forward-looking statements require us to make assumptions and are subject to inherent risks and uncertainties, which give rise to the possibility that our predictions, forecasts, projections, expectations or conclusions will not prove to be accurate, that our assumptions may not be correct and that our financial performance objectives, vision and strategic goals will not be achieved. We caution readers not to place undue reliance on these statements as a number of risk factors could cause our actual results to differ materially from the expectations expressed in such forward-looking statements. These factors – many of which are beyond our control and the effects of which can be difficult to predict – include: credit, market, liquidity and funding, insurance, operational, regulatory compliance (which could lead to us being subject to various legal and regulatory proceedings, the potential outcome of which could include regulatory restrictions, penalties and fines), strategic, reputation, competitive, legal and regulatory environment, and systemic risks and other risks discussed in the risk sections and Impact of COVID-19 pandemic section of the 2021 Management's Discussion and Analysis and the Risk management section of the Q1 2022 Management's Discussion and Analysis incorporated by reference herein; including business and economic conditions, information technology and cyber risks, environmental and social risk (including climate change), digital disruption and innovation, Canadian housing and household indebtedness, geopolitical uncertainty, privacy, data and third-party related risks, regulatory changes, culture and conduct, the business and economic conditions in the geographic regions in which we operate, the effects of changes in government fiscal,

monetary and other policies, tax risk and transparency, and the emergence of widespread health emergencies or public health crises such as pandemics and epidemics, including the COVID-19 pandemic and its impact on the global economy, financial market conditions and our business operations, and financial results, condition and objectives. In addition, as we work to advance our climate goals, external factors outside of the Bank's reasonable control may act as constraints on their achievement, including varying decarbonization efforts across economies, the need for thoughtful climate policies around the world, more and better data, reasonably supported methodologies, technological advancements, the evolution of consumer behaviour, the challenges of balancing interim emissions goals with an orderly and just transition, and other significant considerations such as legal and regulatory obligations.

We caution that the foregoing list of risk factors is not exhaustive and other factors could also adversely affect our results. When relying on our forward-looking statements to make decisions with respect to us or the Securities, investors and others should carefully consider the foregoing factors and other uncertainties and potential events. Material economic assumptions underlying the forward-looking statements contained in this prospectus are set out in the Economic, market and regulatory review and outlook section and for each business segment under the Strategic priorities and Outlook headings in our 2021 Management's Discussion and Analysis, as updated by the Economic, market and regulatory review and outlook section of the Q1 2022 Management's Discussion and Analysis. Except as required by law, we do not undertake to update any forward-looking statement, whether written or oral, that may be made from time to time by us or on our behalf.

Additional information about these and other factors can be found in the risk sections and Impact of COVID-19 pandemic section of the 2021 Management's Discussion and Analysis and in the Risk management section of the Q1 2022 Management's Discussion and Analysis incorporated by reference in this prospectus.

## Royal Bank of Canada Senior Note Program Index Linked Securities

# Maximum \$20,000,000 (200,000 Securities)

# RBC Lesser of Index Callable Yield 5.00% Securities (CAD), Series 542

Due March 30, 2027

**Non-Principal Protected Securities** 

Issuer: Royal Bank of Canada (the "Bank")

**Dealers:** RBC Dominion Securities Inc. ("**RBC DS**") and Laurentian Bank Securities Inc.

Laurentian Bank Securities Inc., a dealer to which we are neither related nor connected, participated in the due diligence activities performed by the Dealers in respect of the offering, but did not participate in the structuring and pricing of the offering or the calculation of the initial estimated value of the Securities. See "Plan of Distribution" in

the program supplement.

Issue: RBC Lesser of Index Callable Yield 5.00% Securities (CAD), Series 542, due March

30, 2027.

**Fundserv Code:** RBC7742

**Objective of the Securities:** The Securities have been designed for investors who are prepared and can afford to take

the risk that they will lose substantially all of their investment, that regular Interest Payments (defined below) will not be made on the Securities, and that the Securities will be redeemed early, because they believe that the Closing Level (defined below) of each Index (defined below) will be greater than or equal to its Coupon Barrier Level (defined below) but less than its Autocall Redemption Level (defined below) on each Observation Date (defined below) and that the Final Index Level (defined below) of the Worst Performing Index (defined below) will be greater than or equal to its Protection Barrier Level (defined below). Holders of the Securities will receive an Interest Payment on each Interest Payment Date (defined below) for which a Digital Payout Event (defined

below) occurred on the immediately preceding Observation Date.

**Issue Price:** The Securities will be issued at a price equal to their Principal Amount (defined below).

**Minimum Investment:** 50 Securities or \$5,000.

**Denomination:** Securities are issuable in denominations of \$100 (the "Principal Amount") and in

minimum increments of \$100.

**Issue Date:** March 30, 2022 or such other date as may be agreed to by the Bank and the Dealers.

**Issue Size:** The maximum issue size will be an aggregate amount of \$20,000,000.

Maturity Date: March 30, 2027 (approximately a five-year term), subject to earlier redemption on an

Autocall Redemption Event (defined below) or earlier repayment in full on an Extraordinary Event. See "Description of the Index Linked Securities – Maturity Date

and Amount Payable" in the product supplement.

Principal at Risk Securities: All but 1% of the Principal Amount of the Securities is fully exposed. You could lose

substantially all of your investment. See "Description of the Index Linked Securities —

Principal at Risk Securities" and "Risk Factors" in the product supplement.

Indices: The return on the Securities is linked to the price performance of the S&P 500<sup>®</sup> Index

and the S&P/TSX 60 Index (the "Indices" and each, an "Index").

See "Description of the Index Linked Securities — Indices" in the product supplement. See Appendix A to this pricing supplement for summary information regarding the

Indices.

Securities do not represent an interest in the Indices or in the securities of the companies that comprise the Indices, and holders will have no right or entitlement to such securities including, without limitation, redemption rights (if any), voting rights or rights to receive dividends or other distributions paid on such securities (the annual dividend yields on the S&P 500® Index and the S&P/TSX 60 Index as of March 10, 2022 were 1.449% and 2.669%, respectively, representing aggregate dividend yields of approximately 7.459% and 14.077%, respectively, compounded annually over the five-year term, on the assumption that the dividend yields remain constant). There is no requirement for the

Bank to hold any interest in the Indices or in the securities of the companies that comprise the Indices.

This pricing supplement has been prepared for the sole purpose of assisting prospective investors in making an investment decision with respect to the Securities. This pricing supplement relates only to the Securities offered hereby and does not relate to the Indices and/or the Index Sponsor (defined below). The Bank and the Dealers have not verified the accuracy or completeness of any information pertaining to the Indices or determined whether there has been any omission by the Index Sponsor to disclose any facts, information or events which may have occurred prior to or subsequent to the date as of which any information has been furnished by the Index Sponsor which may affect the significance or accuracy of such information. Neither the Bank nor any Dealer makes any representation that such publicly available documents or any other publicly available information regarding any Index or Index Sponsor is accurate or complete. Prospective investors should independently investigate the Indices and the Index Sponsor and decide whether an investment in the Securities is appropriate. The Index Sponsor has not participated in the preparation of this pricing supplement and the Securities are not in any way sponsored, endorsed, sold or promoted by the Index Sponsor. See "Description of the Index Linked Securities – Indices" in the product supplement.

**Index Sponsor:** 

"Index Sponsor" means Standard & Poor's.

**Initial Index Level:** 

The "Initial Index Level" for an Index is the Closing Level of such Index, as published by the Index Sponsor, on the Initial Valuation Date (defined below).

**Initial Valuation Date:** 

The "Initial Valuation Date" is March 18, 2022.

**Protection Barrier Level:** 

The "Protection Barrier Level" for an Index is 75.00% of the Initial Index Level of such Index.

**Coupon Barrier Level:** 

The "Coupon Barrier Level" for an Index is 75.00% of the Initial Index Level of such Index.

**Final Index Level:** 

The "Final Index Level" for an Index is the Closing Level of such Index, as published by the Index Sponsor, on March 18, 2027 (the "Final Valuation Date").

**Closing Level:** 

The "Closing Level" of an Index on any date is the official closing level of such Index quoted on www.spglobal.com/spdji for such date, as determined by the Calculation Agent (defined below). The official closing levels of the Indices are available from other sources, such as Bloomberg; however, neither the Bank nor the Dealers make any representation as to the accuracy of such information and all calculations regarding the Closing Level will be made by the Calculation Agent.

**Observation Dates:** 

An "Observation Date" for the purposes of determining the amount of any Interest Payment will occur quarterly on the dates specified below in each year that the Securities are outstanding, from and including June 21, 2022 to and including March 18, 2027. If any such Observation Date is not an Exchange Day (defined in the product supplement), it shall be postponed to the next succeeding Exchange Day.

Provided that the Securities are not redeemed by the Bank as described below, the Bank intends the Observation Dates to be:

June 21, 2022 September 19, 2022 December 19, 2022 March 20, 2023 June 20, 2023 September 18, 2023 March 18, 2024 December 18, 2023 June 18, 2024 September 18, 2024 December 18, 2024 March 18, 2025 June 18, 2025 September 18, 2025 December 18, 2025 March 18, 2026 June 18, 2026 September 18, 2026 December 18, 2026 March 18, 2027

**Interest Payment Dates:** 

The "Interest Payment Date" for an Interest Payment, if any, will occur quarterly on the dates specified below in each year that the Securities are outstanding, from and including June 24, 2022 to and including March 30, 2027. Provided that the Securities

are not redeemed by the Bank as described below, the Bank intends the Interest Payment Dates to be:

June 24, 2022 September 22, 2022 December 22, 2022 March 23, 2023 June 23, 2023 September 21, 2023 December 21, 2023 March 21, 2024 June 21, 2024 September 23, 2024 December 23, 2024 March 21, 2025 June 23, 2025 September 23, 2025 December 23, 2025 March 23, 2026 June 23, 2026 September 23, 2026 December 23, 2026 March 30, 2027

The final Interest Payment, if any, will be made on the earlier of the Autocall Redemption Date (defined below) (if applicable) and the Maturity Date.

Interest payments (the "Interest Payments" and each, an "Interest Payment"), if any, on the Securities will be payable on each Interest Payment Date, in arrears, at a fixed interest rate of 1.2500% quarterly ending on an Interest Payment Date (an "Interest Period") for each Interest Period in which a Digital Payout Event occurs on the Observation Date occurring in the Interest Period. On the basis of the foregoing, the interest on each \$100 Principal Amount of Securities for an Interest Period in which a Digital Payout Event has occurred would equal \$100 × 1.2500%.

Thus, if a Digital Payout Event occurs:

- (a) on each Observation Date in any twelve-month period, the amount of interest payable on each \$100 Principal Amount of Securities for that twelve-month period will be \$5.00;
- (b) on three out of the four Observation Dates in any twelve-month period, the amount of interest payable on each \$100 Principal Amount of Securities for that twelve-month period will be \$3.75;
- (c) on two out of the four Observation Dates in any twelve-month period, the amount of interest payable on each \$100 Principal Amount of Securities for that twelve-month period will be \$2.50; and
- (d) on one out of the four Observation Dates in any twelve-month period, the amount of interest payable on each \$100 Principal Amount of Securities for that twelve-month period will be \$1.25.

If a Digital Payout Event does not occur on the Observation Date during a particular Interest Period, no interest will be payable on the Securities for such Interest Period.

A "**Digital Payout Event**" will occur if, on the relevant Observation Date, the Closing Level of each Index is greater than or equal to its Coupon Barrier Level. RBC DS intends to publish whether there has been a Digital Payout Event on each Observation Date on its website at www.rbcnotes.com.

An "Autocall Redemption Event" will occur if the Closing Level of each Index on an Observation Date other than the first, second, third and last Observation Dates is greater than or equal to its Initial Index Level (the "Autocall Redemption Level"). On the next succeeding Interest Payment Date following the occurrence of an Autocall Redemption Event (the "Autocall Redemption Date") the Securities will be redeemed for an amount equal to the Principal Amount thereof (the "Autocall Redemption Amount"). In addition to the Autocall Redemption Amount, an Interest Payment will be paid on the Autocall Redemption Date.

On the Maturity Date, if the Securities have not been previously redeemed, the amount payable (the "Final Redemption Amount") for each \$100 Principal Amount per Security will be equal to:

- (a) if the Final Index Level of the Worst Performing Index is greater than or equal to its Protection Barrier Level, \$100; or
- (b) if the Final Index Level of the Worst Performing Index is less than its Protection Barrier Level, an amount equal to the Index Return, but in any event not less than \$1.00.

**Interest Payments:** 

**Digital Payout Event:** 

**Autocall Redemption Event:** 

**Payment at Maturity:** 

As a result, the Final Redemption Amount will not be determinable before the Final

Valuation Date. See "Risk Factors" below.

In addition to the Final Redemption Amount, an Interest Payment will be paid on the Maturity Date if a Digital Payout Event occurs on the Final Valuation Date.

"Index Return" means  $100 \times (X_f / X_i)$ , **Index Return:** 

where:

"X<sub>f</sub>" means the Final Index Level of the Worst Performing Index, and "X<sub>i</sub>" means the Initial Index Level of the Worst Performing Index.

**Worst Performing Index:** The "Worst Performing Index" means the Index with the lowest ratio of Final Index

Level to Initial Index Level.

See Appendix B to this pricing supplement for sample calculations of the Final **Sample Calculations:** 

Redemption Amount or Autocall Redemption Amount (in the event of an Autocall Redemption Event) and any Interest Payments payable on the Securities at or prior to

(in the event of an Autocall Redemption Event) the Maturity Date.

**Issuer Credit Rating:** Moody's: Aa1

**Risk Factors:** 

Standard & Poor's: AA-DBRS: AA

The Securities themselves have not been and will not be rated. See "Description of the

Securities — Ratings" in the program supplement.

**Extraordinary Events:** Determination of the Closing Level of the Indices, including the Initial Index Level and the Final Index Level, and the Final Redemption Amount may be postponed, or the Bank

can accelerate determination of the Final Index Level and the Final Redemption Amount and repay the Securities in full prior to their maturity, in certain circumstances. If an Extraordinary Event occurs then the Calculation Agent may, but is not required to, make such adjustments to any payment or other term of the Securities as it determines to be appropriate, acting in good faith, to account for the economic effect of such event on the Securities and determine the effective date of any such adjustment. See "Description of the Securities — Special Circumstances" in the program supplement and "Description

of the Index Linked Securities — Extraordinary Events" in the product supplement.

A commission of 2.50% of the Principal Amount of Securities issued under this offering **Summary of Fees and Expenses:** 

will be paid to the Dealers for further payment to representatives, including representatives employed by the Dealers, whose clients purchase the Securities. An agency fee will also be paid, from the Bank's own funds, to Laurentian Bank Securities Inc. in an amount up to 0.15% of the Principal Amount of the Securities issued under this offering for acting as independent agent. The selling commissions and the agency fee are indirectly borne by holders of the Securities. There are no fees directly payable by a holder of Securities. See "Description of the Securities — Summary of Fees and Expenses" in the program supplement. An early trading charge may also apply. See

"Secondary Market" below.

**Eligibility for Investment:** Eligible for RRSPs, RRIFs, RESPs, RDSPs, DPSPs and TFSAs. See "Eligibility for

Investment" in Appendix C, including the summary of the "prohibited investment" rule.

You should carefully consider all the information set out in this prospectus for any Securities in which you are considering investing. In particular, you should evaluate the risks described under "Risk Factors" in each of the base shelf prospectus and the product supplement, as well as the risks described below. The return on the Securities is unknown and subject to many variables, including interest rate fluctuations and changes in the levels of the Indices. You should independently determine, with your own advisors, whether an investment in the Securities is suitable for you having regard

to your own investment objectives and expectations.

#### Limited Upside Participation by the Securities

The return on the Securities is limited; even if the Closing Level of each Index is greater than its Coupon Barrier Level but less than its Autocall Redemption Level on each Observation Date and the Final Index Level of the Worst Performing Index is greater than or equal to its Protection Barrier Level, the maximum return on the Securities would be equal to \$25.00 per Security. The Securities will not participate in any upside performance of the Indices.

#### Uncertain Return until Final Valuation Date

The return, if any, on the Securities will be uncertain until the Final Valuation Date, unless the Securities are called for redemption prior to the Final Valuation Date. Whether there is a return on the Securities will depend on the Closing Levels of the Indices on the Observation Dates and the Final Valuation Date. No Interest Payment will be made on an Interest Payment Date unless there is a Digital Payout Event on the immediately preceding Observation Date. There can be no assurance that the Securities will generate a positive return or that the objectives of the Securities will be achieved. Holders of the Securities may not be repaid the amount they invested in the Securities (other than \$1.00 per Security), depending on the price performance of the Worst Performing Index. Historical levels of the Indices should not be considered as an indication of the future price performance of the Indices. Investors should understand that the risk involved in this type of investment is greater than that normally associated with other types of investments.

#### Performance of Each Index may not Affect the Final Redemption Amount Equally

If the Final Index Level of any Index is less than its Protection Barrier Level, an investor could suffer a loss of up to substantially all of the initial amount invested. If the Final Index Level of any Index is less than its Protection Barrier Level, the Final Redemption Amount payable to investors depends solely on the price performance of the Worst Performing Index and the other Indices will not be considered when determining the Final Redemption Amount payable to investors. As a result, even if any other Index has achieved a positive price performance over the term of the Securities, the price performance of the Worst Performing Index, which could be negative, could adversely affect an investor's return and cause an investor to lose substantially all of the Principal Amount of the Securities.

## Volatility May Affect the Return on or Trading Value of the Securities

Volatility is the term used to describe the size and frequency of price and/or market fluctuations. If the volatility, or anticipated volatility, of any of the Indices changes over the term of the Securities, the trading value of the Securities may be adversely affected. In addition, if the Closing Level of any of the Indices on an Observation Date is less than its Coupon Barrier Level, you will not receive an Interest Payment on the relevant Interest Payment Date, and if the Final Index Level of any of the Indices is less than its Protection Barrier Level, the Final Redemption Amount will be reduced such that you will receive less than the Principal Amount on the Maturity Date. In periods of high volatility, the likelihood of an investor not receiving some or all of the Interest Payments or a return of the full Principal Amount of the Securities increases.

#### The Securities may be Redeemed prior to the Maturity Date

The Securities will be automatically redeemed by the Bank on the Autocall Redemption Date if the Closing Level of each Index on an Observation Date, other than the first, second, third and last Observation Dates, is greater than or equal to its Autocall Redemption Level. In such event, investors will receive an Autocall Redemption Amount equal to the Principal Amount of the Securities. If the Securities are redeemed by the Bank, investors will not be entitled to receive any further interest that they may have been entitled to receive if the Securities had not been redeemed by the Bank.

Changes in the implied correlation of the Closing Levels of the Indices may affect the trading value of the Securities. The extent to which the Closing Levels of the Indices are correlated will vary from time to time in a manner that is not predictable. If an implied correlation between the Indices which has not yet prompted an Autocall Redemption Event were to increase, we expect that the trading value of the Securities may decrease.

The Initial Estimated Value of the Securities Is Less than the Price to the Public and May not Reflect the Secondary Market Price, if any, of the Securities

The initial estimated value set forth on the cover page of this pricing supplement does not represent a minimum price at which the Bank, RBC DS or any of our affiliates would be willing to purchase the Securities in any secondary market (if any exists) at any time. If you attempt to sell the Securities prior to maturity, their market value may be lower than the initial estimated value and the price you paid for them. This is due to, among other things, changes in the level of the Indices and the inclusion in the price to the public of the selling commissions and the agency fee, as well as an amount retained by the Bank to compensate it for the creation, issuance and maintenance of the Securities (which may or may not also include any costs of its hedging obligations thereunder). These factors, together with various market and economic factors over the term of the Securities, could reduce the price at which you may be able to sell the Securities in any secondary market and will affect the value of the Securities in complex and unpredictable ways. Even if there is no change in market conditions or any other relevant factors, the price, if any, at which you may be able to sell your Securities prior to maturity may be less than your original purchase price. The Securities are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your Securities to maturity.

The Initial Estimated Value of the Securities Is an Estimate Only, Calculated as of the Time the Terms of the Securities Were Set

The initial estimated value of the Securities is based on the value of the Bank's obligation to make the payments on the Securities. The return on the Securities can be replicated by purchasing and selling a combination of financial instruments, such as call options and put options. The fair value of the financial instrument components that would replicate the return on the Securities is equal to the fair value of the Securities. The Bank's estimate is based on a variety of assumptions, which may include expectations as to dividends, interest rates, the Bank's internal funding rates and volatility, and the term to maturity and any earlier call date of the Securities. The Bank's internal funding rates may differ from the market rates for the Bank's conventional debt securities. These assumptions are based on certain forecasts about future events, which may prove to be incorrect. Other entities may value the Securities or similar securities at a price that is significantly different than the Bank does. The value of the Securities at any time after the date of this pricing supplement will vary based on many factors, including changes in market conditions, and cannot be predicted with accuracy. As a result, the actual value you would receive if you sold the Securities in the secondary market, if any, should be expected to differ materially from the initial estimated value of the Securities.

Preparation of Initial Estimated Value:

The Securities are debt securities of the Bank, the return on which is linked to the price performance of the Indices. In order to satisfy the Bank's payment obligations under the Securities, the Bank may choose to enter into certain hedging arrangements (which may include call options, put options or other derivatives) on the Issue Date which may or may not be with RBC DS or one of our other subsidiaries. The terms of these hedging arrangements, if any, take into account a number of factors, including the Bank's creditworthiness, interest rate movements, the volatility of the Indices, and the term to maturity and any earlier call date of the Securities.

The price of the Securities to the public also reflects the selling commissions and the agency fee, as well as an amount retained by the Bank to compensate it for the creation, issuance and maintenance of the Securities (which may or may not also include any costs of its hedging obligations thereunder). The initial estimated value for the Securities shown on the cover page will therefore be less than their public offering price. See "Risk Factors – The Initial Estimated Value of the Securities Is Less than the Price to the Public and May not Reflect the Secondary Market Price, if any, of the Securities" above.

The Bank has adopted written policies and procedures for determining the fair value of Securities issued by it pursuant to the Senior Note Program. These policies and procedures include: (a) methodologies used for valuing each type of financial instrument component that can be used in combination to replicate the return of the Securities; (b) the methods by which the Bank will review and test valuations to assess the quality of the prices obtained as well as the general functioning of the valuation process; and (c) how to deal with conflicts of interest.

**Suitability for Investment:** 

You should consult with your advisors regarding the suitability of an investment in the Securities. The Securities may be suitable for:

- investors seeking an investment product with exposure to the large-cap segments of the United States and Canadian equity markets
- investors who believe that the Closing Level of each Index will be equal to or above its Coupon Barrier Level on each Observation Date
- investors who believe that the Final Index Level of the Worst Performing Index will not be below its Protection Barrier Level
- investors who are willing and can afford to risk substantially all of the principal amount of their investment
- investors looking for the potential to earn a return linked to the price performance of the Indices and who are prepared to assume the risks associated with an investment linked to the price performance of the Indices
- investors with an investment horizon equal to the term to maturity of the Securities who are prepared to hold the Securities until maturity, but who are willing to assume the risk that the Securities will be redeemed prior to the Maturity Date if the Closing Level of each Index is equal to or exceeds its Autocall Redemption Level on an Observation Date (other than the first, second, third and last Observation Dates)
- investors who are prepared to take the risk that regular Interest Payments will not be made on the Securities
- investors who understand that the potential return on the Securities is limited; the maximum return on the Securities is equal to \$25.00 per Security

The Securities will be Fundserv Securities (defined in the program supplement) and will be issued through the "book-entry-only system". See "Description of the Securities – Global Securities" and "–Legal Ownership" in the program supplement. If the Securities are issued in fully registered and certificated form in the circumstances described in the program supplement under "Description of the Securities – Legal Ownership – Book-Entry-Only Fundserv Securities", the Autocall Redemption Amount (in the event of an Autocall Redemption Event) and any Interest Payments will be paid by the Bank to the registered holder.

The Securities will not be listed on any stock exchange. See "Risk Factors" in the product supplement.

Securities may be purchased through dealers and other firms that facilitate purchase and related settlement using the Fundserv network. Securities may be resold using the Fundserv network at a sale price equal to the price posted on Fundserv as of the close of business on the Exchange Day on which the order is placed, as determined by and posted to Fundserv by the Calculation Agent, which sale price may be lower than the Principal Amount of such Securities, and such purchase price may be less an early trading charge as specified below. Generally, to be effective on a Business Day (defined in the program supplement), a redemption request will need to be initiated by 2:00 p.m. (Toronto time) on that Business Day (or such other time as may be established by Fundserv). Any request received after such time will be deemed to be a request sent and received on the next following Business Day. See "Risk Factors – The Initial Estimated Value of the Securities Is Less than the Price to the Public and May not Reflect the Secondary Market Price, if any, of the Securities" above and "Secondary Market for Securities – Fundserv" in the program supplement.

Information regarding the Closing Level, the Coupon Barrier Level, the Protection Barrier Level and the daily closing price for the Securities may be accessed at www.rbcnotes.com. There is no assurance that a secondary market for the Securities will develop or be sustained. See "Secondary Market for Securities" in the program supplement.

If a Security is sold within the first 270 days from the Issue Date, the proceeds from the sale of the Securities will be reduced by an early trading charge ("Early Trading Charge") equal to a percentage of the Principal Amount determined as set out below.

If Sold Within the Following No. of Days from Issue Date	Early Trading Charge (% of Principal Amount)			
1 - 45 days	3.00%			
46 - 90 days	2.75%			

**Book-entry Only Securities:** 

Listing:

**Secondary Market:** 

91 - 135 days 2.50% 136 - 180 days 2.00% 181 - 225 days 1.50% 226 - 270 days 1.00% Thereafter Nil

**Fiscal Agent:** 

RBC DS. See "Description of the Securities – Fiscal Agency, Calculation Agency and Fundserv Depository Agreement" in the program supplement.

**Calculation Agent:** 

RBC DS. See "Description of the Securities – Calculation Agent" in the program supplement and "Risk Factors" in the product supplement.

Tax:

An initial purchaser of Securities who acquires Securities from the Bank on the Issue Date and who, at all relevant times, for purposes of the *Income Tax Act* (Canada), is an individual (other than a trust), is a resident of Canada, deals at arm's length with and is not affiliated with the Bank, and acquires and holds the Securities as capital property will be required to include in computing income all interest received or receivable on the Securities, as well as certain accrued interest thereon on a disposition thereof. If, on maturity or other disposition (including on early redemption or repayment in full by the Bank), such a holder receives an amount that is less than the adjusted cost base of the Securities, such holder will realize a capital loss equal to the shortfall. See "Certain Canadian Tax Considerations" in Appendix C. **Potential purchasers of Securities should consult with their own tax advisors having regard to their particular circumstances.** 

#### APPENDIX A

## **Summary Information Regarding the Indices**

#### The S&P 500® Index

The following is a summary description of the S&P 500<sup>®</sup> Index based on information obtained from the Index Sponsor's website at www.spglobal.com/spdji.

Index	S&P 500® Index				
Country	United States of America				
Current Exchanges	New York Stock Exchange; The NASDAQ Stock Market;				
	Chicago Board Options Exchange				
Index Sponsor	Standard & Poor's				
Number of Component Securities	505				
Method of Calculation	Market Capitalization Weighted				
Closing Level (March 10, 2022)	4,259.52				

## **General Description**

We have obtained all information regarding the S&P 500<sup>®</sup> Index contained herein, including its make-up, method of calculation and changes in its components, from publicly available information. That information reflects the policies of, and is subject to change by, Standard & Poor's ("S&P"). S&P has no obligation to continue to publish, and may discontinue publication of, the S&P 500<sup>®</sup> Index.

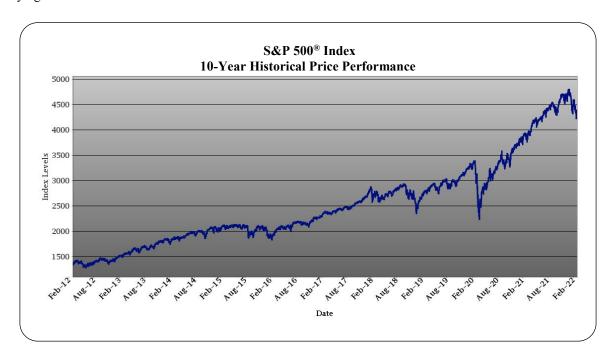
The S&P 500® Index is the most widely accepted barometer of the U.S. market. It includes 500 blue-chip, large-cap stocks, which together represent about 80% of the total U.S. equities market. Companies eligible for addition to the S&P 500® Index have a market capitalization of at least US\$13.1 billion. S&P chooses companies for inclusion in the S&P 500® Index with the aim of achieving a distribution by broad industry groupings that approximates the distribution of these groupings in the common stock population of its stock guide database, which S&P uses as an assumed model for the composition of the total market. Relevant criteria employed by S&P include the viability of the particular company, the extent to which that company represents the industry group to which it is assigned, the extent to which the market price of that company's common stock is generally responsive to changes in the affairs of the respective industry and the market value and trading activity of the common stock of that company. S&P may from time to time, in its sole discretion, add companies to, or delete companies from, the S&P 500® Index to achieve the objectives stated above. S&P calculates the S&P 500® Index by reference to the prices of the S&P constituent stocks without taking account of the value of dividends or other distributions paid on such stocks.

S&P currently computes the S&P 500<sup>®</sup> Index as of a particular time as follows: the product of the market price per share and the number of then outstanding shares of each component stock is determined as of that time (referred to as the "market value" of that stock); the market values of all component stocks as of that time are aggregated; the mean average of the market values as of each week in the base period of the years 1941 through 1943 of the common stock of each company in a group of 500 substantially similar companies is determined; the mean average market values of all these common stocks over the base period are aggregated (the aggregate amount being referred to as the "base value"); the current aggregate market value of all component stocks is divided by the base value; and the resulting quotient, expressed in decimals, is multiplied by ten. While S&P currently employs the above methodology to calculate the S&P 500<sup>®</sup> Index, no assurance can be given that S&P will not modify or change this methodology in a manner that may affect the amount payable at maturity to beneficial owners of the Securities. S&P adjusts the foregoing formula to offset the effects of changes in the market value of a component stock that are determined by S&P to be arbitrary or not due to true market fluctuations. These changes may result from causes such as the issuance of stock dividends; the granting to shareholders of rights to purchase additional shares of stock; the purchase of shares by employees pursuant to employee benefit plans; consolidations and acquisitions; the granting to shareholders of rights to purchase other securities of the issuer; the substitution by S&P of particular component stocks in the S&P 500<sup>®</sup> Index; or other reasons. In these cases, S&P first recalculates the aggregate market value of all component stocks, after taking account of the new market price per share of the particular component stock or the new number of outstanding shares of that stock or both, as the case may be, and then determines the new base value in accordance with the following formula:

The result is that the base value is adjusted in proportion to any change in the aggregate market value of all component stocks resulting from the causes referred to above to the extent necessary to negate the effects of these causes upon the S&P 500<sup>®</sup> Index.

## **Historical Price Performance**

The following chart sets forth the historical level of the S&P 500® Index for the period from February 29, 2012 to February 28, 2022. Historical price performance does not take into account distributions or dividends paid on the securities underlying the S&P 500® Index.



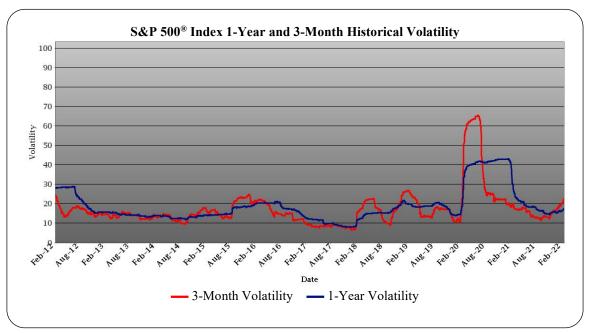
Historical price performance of the S&P 500® Index will not necessarily predict future price performance of the S&P 500® Index or the Securities. The source of the data displayed in this chart is Bloomberg L.P. and its accuracy cannot be guaranteed.

Historical annual percentage change of the S&P 500® Index										
Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Percentage change (%)	13.40	29.60	11.39	-0.73	9.54	19.42	-6.24	28.88	16.26	26.89

Source: Bloomberg L.P.: Measures annualized period as of December 31 of the previous year.

The following chart sets forth the one-year and three-month historical volatility of the S&P 500<sup>®</sup> Index for the period from February 29, 2012 to February 28, 2022.

Historical volatility is not a guarantee of future volatility.



The source of the data displayed in this chart is Bloomberg L.P. and its accuracy cannot be guaranteed.

Volatility is the term used to describe the magnitude and frequency of the changes in a security's value over a given time period. A higher volatility means that a security's value can potentially be spread out over a larger range of values. This means that the price of the security can change dramatically over a short time period in either direction. A lower volatility means that a security's value does not fluctuate dramatically, but changes in value at a steady pace over a period of time.

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The S&P 500<sup>®</sup> Index is a product of S&P Dow Jones Indices LLC or its affiliates ("SPDJI"), and has been licensed for use by the Bank. Standard & Poor's®, S&P® and S&P 500® are registered trademarks of Standard & Poor's Financial Services LLC ("S&P LLC"); Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"); and these trademarks have been licensed for use by SPDJI and sublicensed for certain purposes by the Bank. The Securities are not sponsored, endorsed, sold or promoted by SPDJI, Dow Jones, S&P LLC, any of their respective affiliates (collectively, "S&P Dow Jones Indices"). S&P Dow Jones Indices makes no representation or warranty, express or implied, to the owners of the Securities or any member of the public regarding the advisability of investing in securities generally or in the Securities particularly or the ability of the S&P 500® Index to track general market performance. S&P Dow Jones Indices' only relationship to the Bank with respect to the S&P 500® Index is the licensing of the S&P 500® Index and certain trademarks, service marks and/or trade names of S&P Dow Jones Indices or its licensors. The S&P 500® Index is determined, composed and calculated by S&P Dow Jones Indices without regard to the Bank or the Securities. S&P Dow Jones Indices have no obligation to take the needs of the Bank or the owners of the Securities into consideration in determining, composing or calculating the S&P 500<sup>®</sup> Index. S&P Dow Jones Indices is not responsible for and has not participated in the determination of the prices, and amount of the Securities or the timing of the issuance or sale of the Securities or in the determination or calculation of the equation by which the Securities are to be converted into cash, surrendered or redeemed, as the case may be. S&P Dow Jones Indices has no obligation or liability in connection with the administration, marketing or trading of the Securities. There is no assurance that investment products based on the S&P 500<sup>®</sup> Index will accurately track index performance or provide positive investment returns. S&P Dow Jones Indices LLC is not an investment advisor. Inclusion of a security within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security, nor is it considered to be investment advice. Notwithstanding the foregoing, CME Group Inc. and its affiliates may independently issue and/or sponsor financial products unrelated to the Securities currently being issued by the Bank, but which may be similar to and competitive with the Securities. In addition, CME Group Inc. and its affiliates may trade financial products which are linked to the performance of the S&P 500® Index.

S&P DOW JONES INDICES DOES NOT GUARANTEE THE ADEQUACY, ACCURACY, TIMELINESS AND/OR THE COMPLETENESS OF THE S&P  $500^{\$}$  INDEX OR ANY DATA RELATED THERETO OR ANY

COMMUNICATION, INCLUDING BUT NOT LIMITED TO, ORAL OR WRITTEN COMMUNICATION (INCLUDING ELECTRONIC COMMUNICATIONS) WITH RESPECT THERETO. S&P DOW JONES INDICES SHALL NOT BE SUBJECT TO ANY DAMAGES OR LIABILITY FOR ANY ERRORS, OMISSIONS, OR DELAYS THEREIN. S&P DOW JONES INDICES MAKES NO EXPRESS OR IMPLIED WARRANTIES, AND EXPRESSLY DISCLAIMS ALL WARRANTIES, OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE OR AS TO RESULTS TO BE OBTAINED BY THE BANK, OWNERS OF THE SECURITIES, OR ANY OTHER PERSON OR ENTITY FROM THE USE OF THE S&P 500® INDEX OR WITH RESPECT TO ANY DATA RELATED THERETO. WITHOUT LIMITING ANY OF THE FOREGOING, IN NO EVENT WHATSOEVER SHALL S&P DOW JONES INDICES BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES INCLUDING BUT NOT LIMITED TO, LOSS OF PROFITS, TRADING LOSSES, LOST TIME OR GOODWILL, EVEN IF THEY HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, WHETHER IN CONTRACT, TORT, STRICT LIABILITY, OR OTHERWISE. THERE ARE NO THIRD PARTY BENEFICIARIES OF ANY AGREEMENTS OR ARRANGEMENTS BETWEEN S&P DOW JONES INDICES AND THE BANK, OTHER THAN THE LICENSORS OF S&P DOW JONES INDICES.

#### The S&P/TSX 60 Index

The following is a summary description of the S&P/TSX 60 Index based on information obtained from the Index Sponsor's website at www.spglobal.com/spdji.

Index	S&P/TSX 60 Index
Country	Canada
Current Exchange	Toronto Stock Exchange
Index Sponsor	Standard & Poor's
Number of Component Securities	60
Method of Calculation	Market Capitalization Weighted
Closing Level (March 10, 2022)	1,305.81

#### **General Description**

The S&P/TSX 60 Index is designed to represent leading companies in leading industries. Its 60 stocks make it ideal for coverage of companies with large market capitalizations and a cost-efficient way to achieve Canadian equity exposure. The S&P/TSX 60 Index is weighted according to the market capitalization of its constituents. A capitalization-weighted index reflects both the price and the number of outstanding securities of each underlying company. Thus, with respect to the S&P/TSX 60 Index (in contrast to a "price-weighted" index), changes in the price of the securities of an underlying company with a large market capitalization will generally have a greater influence on the level of the S&P/TSX 60 Index than changes in the price of the securities of an underlying company with a small market capitalization. The S&P/TSX 60 Index is a price return index and will not reflect dividends or other distributions that are paid on the constituent securities.

The S&P/TSX 60 Index is sponsored by Standard & Poor's, an independent provider of financial information, analysis and research for over 125 years. The S&P/TSX 60 Index is calculated every 15 seconds during the normal trading hours on the Toronto Stock Exchange ("TSX"). The level of the S&P/TSX 60 Index may continue to be reported on a current basis even when trading is interrupted in some of its underlying securities. In that event, the reported level of the S&P/TSX 60 Index may be based on the current market prices of those underlying securities that are still being traded (if any) and the last reported prices of those securities that are not currently trading. As a result, reported levels of the S&P/TSX 60 Index may at times be based on non-current price information with respect to some or even all of the underlying securities. As well, for purposes of the Securities, it will be the closing level of the S&P/TSX 60 Index on the relevant day which will be used as the Closing Level for calculation purposes.

We have obtained all information regarding the S&P/TSX 60 Index contained herein, including its make-up, method of calculation and changes in its components, from publicly available information. That information reflects the policies of, and is subject to change by, Standard & Poor's and the TSX.

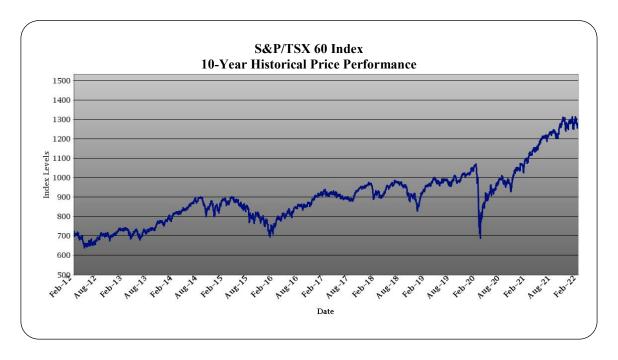
#### Computation

Constituent stocks of the S&P/TSX 60 Index may be altered according to certain addition and deletion rules. The S&P/TSX 60 Index is calculated based on the following formula:

of fidex is calculated based on the following formula.						
Aggregate Float QMV Divisor	=	Index (SPIV)				
where:						
Aggregate Float QMV	=	The sum of the float quoted market value of the companies which comprise the S&P/TSX 60 Index. The float QMV is calculated as follows: (Outstanding Shares - Control Block) × Price				
Control Block	=	Any individual or group of related individuals who control 20% or more of the outstanding shares. This information is obtained from each company's information circular, contact with the company, or from insider reports from the Ontario Securities Commission.				
Divisor	=	The trade-weighted average float quoted market value for all original S&P/TSX 60 Index stocks. Whenever a change to the S&P/TSX 60 Index occurs (i.e., additions, deletions, changes in share capital), the divisor is adjusted in order to ensure that the S&P/TSX 60 Index level remains unaltered following the changes.				
Outstanding Shares	=	Number of shares each company has issued and outstanding. This information is obtained from the TSX's Listings Department and the individual companies.				
Price	=	The last trade price for a board lot of shares.				
SPIV	=	Stock Price Index Value.				

## **Historical Price Performance**

The following chart sets forth the historical level of the S&P/TSX 60 Index for the period from February 29, 2012 to February 28, 2022. Historical price performance does not take into account distributions or dividends paid on the securities underlying the S&P/TSX 60 Index.



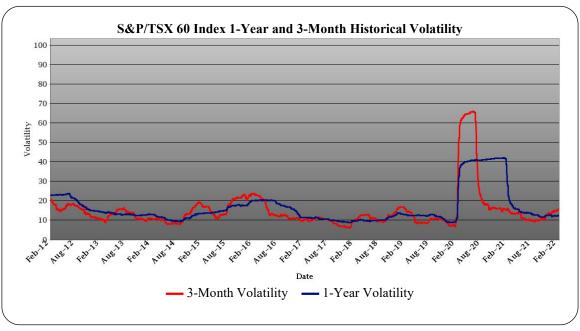
Historical price performance of the S&P/TSX 60 Index will not necessarily predict future price performance of the S&P/TSX 60 Index or the Securities. The source of the data displayed in this chart is Bloomberg L.P. and its accuracy cannot be guaranteed.

Historical annual percentage change of the S&P/TSX 60 Index										
Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Percentage change (%)	4.82	9.81	9.07	-10.56	17.72	6.63	-10.46	18.11	1.96	24.37

Source: Bloomberg L.P.: Measures annualized period as of December 31 of the previous year.

The following chart sets forth the one-year and three-month historical volatility of the S&P/TSX 60 Index for the period from February 29, 2012 to February 28, 2022.

Historical volatility is not a guarantee of future volatility.



The source of the data displayed in this chart is Bloomberg L.P. and its accuracy cannot be guaranteed.

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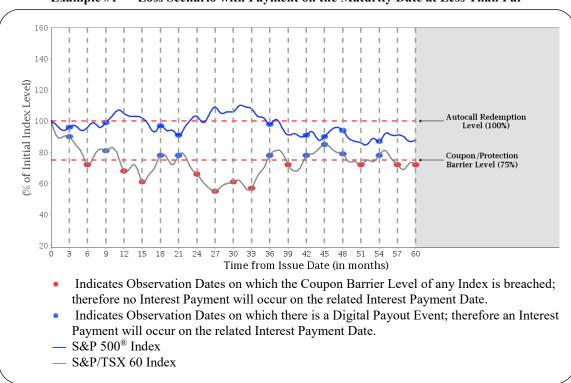
NEITHER S&P DOW JONES INDICES NOR TSX INC. GUARANTEES THE ACCURACY, TIMELINESS AND/OR THE COMPLETENESS OF THE S&P/TSX 60 INDEX OR ANY DATA RELATED THERETO OR ANY COMMUNICATION, INCLUDING BUT NOT LIMITED TO, ORAL OR WRITTEN COMMUNICATION (INCLUDING ELECTRONIC COMMUNICATIONS) WITH RESPECT THERETO. S&P DOW JONES INDICES AND TSX INC. SHALL NOT BE SUBJECT TO ANY DAMAGES OR LIABILITY FOR ANY ERRORS, OMISSIONS, OR DELAYS THEREIN. S&P DOW JONES INDICES AND TSX INC. MAKE NO EXPRESS OR IMPLIED WARRANTIES, AND EXPRESSLY DISCLAIM ALL WARRANTIES, OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE OR AS TO RESULTS TO BE OBTAINED BY THE BANK, OWNERS OF THE SECURITIES, OR ANY OTHER PERSON OR ENTITY FROM THE USE OF THE S&P/TSX 60 INDEX OR WITH RESPECT TO ANY DATA RELATED THERETO. WITHOUT LIMITING ANY OF THE FOREGOING, IN NO EVENT WHATSOEVER SHALL S&P DOW JONES INDICES OR TSX INC. BE LIABLE FOR ANY INDIRECT,

SPECIAL, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES INCLUDING BUT NOT LIMITED TO, LOSS OF PROFITS, TRADING LOSSES, LOST TIME OR GOODWILL, EVEN IF THEY HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, WHETHER IN CONTRACT, TORT, STRICT LIABILITY, OR OTHERWISE. THERE ARE NO THIRD PARTY BENEFICIARIES OF ANY AGREEMENTS OR ARRANGEMENTS BETWEEN S&P DOW JONES INDICES AND THE BANK, OTHER THAN THE LICENSORS OF S&P DOW JONES INDICES.

#### APPENDIX B

## Sample Calculations of Final Redemption Amount or Autocall Redemption Amount and Interest Payments

The examples set out below are included for illustration purposes only. The price performance of the Indices used to illustrate the calculation of the Final Redemption Amount or Autocall Redemption Amount and the Interest Payments over the term of the Securities is not an estimate or forecast of the price performance of the Indices or the Securities. All examples assume that a holder of the Securities has purchased Securities with an aggregate Principal Amount of \$100 and that no Extraordinary Event has occurred. All examples assume a Coupon Barrier Level of 75.00% of the Initial Index Level of each Index, a Protection Barrier Level of 75.00% of the Initial Index Level of each Index and an Autocall Redemption Level of 100.00% of the Initial Index Level of each Index. For convenience, each vertical line in the charts below represents both a hypothetical Observation Date and the next succeeding Interest Payment Date. Certain dollar amounts are rounded to the nearest whole cent.



Example #1 — Loss Scenario with Payment on the Maturity Date at Less Than Par

In this scenario, there is no Observation Date on which the Closing Levels of all of the Indices are at or above their respective Autocall Redemption Levels and, accordingly, the Securities would not be redeemed before the Maturity Date. On the Final Valuation Date, the Final Index Level of the Worst Performing Index is below its Protection Barrier Level.

## (i) Interest Payments

In this example, there is a Digital Payout Event on 9 of the 20 Observation Dates. On the other 11 Observation Dates, no Digital Payout Event would occur because the Closing Level of at least one of the Indices is below its Coupon Barrier Level. Therefore, the Interest Payment of \$1.25 per Interest Period would be payable for 9 Interest Periods on the applicable Interest Payment Date, for total Interest Payments of:

Principal Amount of Securities 
$$\times$$
 1.2500% per Interest Period  $\times$  9 Interest Periods  $\$100 \times 1.2500\% \times 9 = \$11.25$ 

## (ii) Final Redemption Amount

In this example, the S&P/TSX 60 Index is the Worst Performing Index, with an Initial Index Level  $(X_i)$  of 1,305.81 and Final Index Level  $(X_f)$  of 940.18. Therefore, the Final Redemption Amount is as follows:

$$\$100 \times (X_f / X_i)$$
 
$$\$100 \times (940.18 / 1,305.81) = \$72.00$$

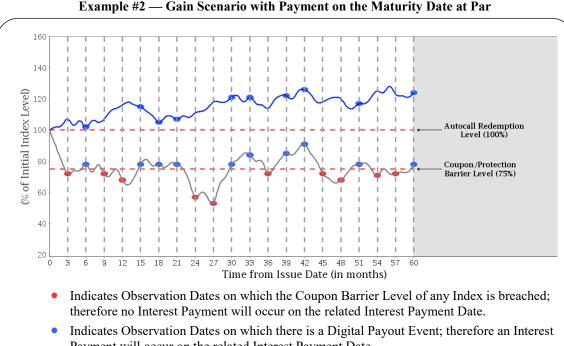
Therefore, the total amounts payable per Security from the Issue Date to the Maturity Date are:

(a) Total Interest Payments: \$11.25

(b) Final Redemption Amount: \$72.00

(c) Total amount paid over the term of the Securities: \$83.25

The equivalent annually compounded rate of return in this example is -3.60%.



Example #2 — Gain Scenario with Payment on the Maturity Date at Par

Payment will occur on the related Interest Payment Date.

- S&P 500® Index
- S&P/TSX 60 Index

In this scenario, there is no Observation Date on which the Closing Levels of all of the Indices are at or above their respective Autocall Redemption Levels and, accordingly, the Securities would not be redeemed before the Maturity Date. On the Final Valuation Date, the Final Index Level of the Worst Performing Index is at or above its Protection Barrier Level.

## (i) Interest Payments

In this example, there is a Digital Payout Event on 10 of the 20 Observation Dates. On the other 10 Observation Dates, no Digital Payout Event would occur because the Closing Level of at least one of the Indices is below its Coupon Barrier Level. Therefore, the Interest Payment of \$1.25 per Interest Period would be payable for 10 Interest Periods on the applicable Interest Payment Date for total Interest Payments of:

Principal Amount of Securities 
$$\times$$
 1.2500% per Interest Period  $\times$  10 Interest Periods  $$100 \times 1.2500\% \times 10 = $12.50$ 

#### (ii) Final Redemption Amount

In this example, since the S&P/TSX 60 Index is the Worst Performing Index with a Final Index Level of 1,070.76, which is above its Protection Barrier Level of 979.36, the Final Redemption Amount per Security is equal to \$100.00.

Therefore, the total amounts payable per Security from the Issue Date to the Maturity Date are:

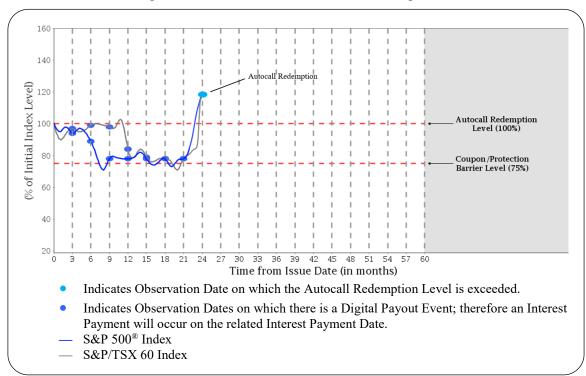
(a) Total Interest Payments: \$12.50

(b) Final Redemption Amount: \$100.00

(c) Total amount paid over the term of the Securities: \$112.50

The equivalent annually compounded rate of return in this example is 2.38%.

Example #3 — Gain Scenario with Autocall Redemption Event



In this scenario, the Closing Levels of all of the Indices are at or above their respective Autocall Redemption Levels on the Observation Date that falls 24 months into the term of the Securities. This would constitute an Autocall Redemption Event and, on the next succeeding Interest Payment Date, the Bank would redeem the Securities.

## (i) Interest Payments

In this example, there is a Digital Payout Event on each of the 8 Observation Dates prior to the redemption of the Securities because the Closing Levels of all of the Indices are at or above their respective Coupon Barrier Levels on each such date. Therefore, the Interest Paymentof \$1.25 per Interest Period would be payable for each Interest Period on the applicable Interest Payment Date (including on the Autocall Redemption Date), for total Interest Payments of:

Principal Amount of Securities  $\times$  1.2500% per Interest Period  $\times$  8 Interest Periods  $\$100 \times 1.2500\% \times 8 = \$10.00$ 

## (ii) Autocall Redemption Amount

The Autocall Redemption Amount per Security is equal to \$100.00.

Therefore, the total amounts payable per Security from the Issue Date to the Autocall Redemption Date are:

- (a) Total Interest Payments: \$10.00
- (b) Autocall Redemption Amount: \$100.00
- (c) Total amount paid over the term of the Securities: \$110.00

The equivalent annually compounded rate of return in this example is 4.88%.

#### APPENDIX C

## **Certain Canadian Tax Considerations**

In the opinion of the Bank's counsel, Davies Ward Phillips & Vineberg LLP, the following summary fairly describes the principal Canadian federal income tax considerations under the *Income Tax Act* (Canada) (the "Tax Act") generally applicable to an initial purchaser of Securities under this pricing supplement who, at all relevant times, for purposes of the Tax Act, deals at arm's length with and is not affiliated with the Bank (a "Holder").

This summary is based upon the current provisions of the Tax Act and the regulations thereunder (the "Regulations"), all specific proposals to amend the Tax Act or such Regulations publicly announced by the federal Minister of Finance prior to the date hereof (the "Proposals") and counsel's understanding of the current administrative and assessing policies and practices of the Canada Revenue Agency ("CRA"). Except for the Proposals, this summary does not take into account or anticipate any changes (including retroactive changes) in the law or the administrative and assessing policies or practices of the CRA, whether by judicial, regulatory, governmental or legislative action, nor does it take into account tax laws of any province or territory of Canada, or of any jurisdiction outside Canada. Provisions of provincial income tax legislation vary from province to province in Canada and may differ from federal income tax legislation. No assurance can be given that the Proposals will be implemented in their current form, or at all. This summary assumes that the Holder will neither undertake nor arrange a transaction in respect of the Securities primarily for the purpose of obtaining a tax benefit, has not entered into a "derivative forward agreement" (as defined in the Tax Act) in respect of the Securities and that the Securities are not issued at a discount.

This summary is of a general nature only and is not intended to constitute, nor should it be relied upon or construed as, tax advice to any particular Holder, nor is it exhaustive of all possible Canadian federal income tax considerations. Holders should consult their own tax advisors as to the potential consequences to them of the acquisition, ownership and disposition of Securities having regard to their particular circumstances.

#### **Holders Resident in Canada**

The following discussion applies to a Holder who, at all relevant times, for the purposes of the Tax Act and any applicable income tax treaty or convention, is an individual (other than a trust) who is resident (or deemed to be resident) in Canada and who acquires and holds the Securities as capital property (a "Resident Holder"). Certain Resident Holders who might not otherwise be considered to hold their Securities as capital property may, in certain circumstances, be entitled to have their Securities, and all other "Canadian securities" (as defined in the Tax Act) owned by such Resident Holders in the taxation year and all subsequent taxation years, treated as capital property by making the irrevocable election permitted by subsection 39(4) of the Tax Act.

#### Interest

The amount of any interest received or receivable (depending on the method regularly followed in computing income under the Tax Act) by a Resident Holder in a taxation year (including on redemption or repayment in full by the Bank) will be required to be included in computing the Resident Holder's income for the taxation year, except to the extent that such amount has already been included in the Resident Holder's income for that or a preceding taxation year.

## Disposition of Securities

On a disposition or deemed disposition of a Security by a Resident Holder to a person (other than the Bank), the amount of any interest accrued on the Security to the time of disposition will be required to be included in computing the Resident Holder's income for the taxation year in which the disposition takes place (except to the extent that such accrued interest has already been included in the Resident Holder's income for that or a preceding taxation year), and will be excluded from the proceeds of disposition of the Security. Because the interest entitlement of a Resident Holder for a particular Interest Period will generally only be determinable on the Observation Date for that period, whether any accrued interest will be payable on a Security at the time of disposition may, in some circumstances, be considered uncertain.

In addition, the Resident Holder should realize a capital gain (or capital loss) to the extent that the proceeds of disposition, net of amounts included in income as interest and any reasonable costs of disposition, exceed (or are exceeded by) the adjusted cost base of the Security to the Resident Holder. One-half of any capital gain realized by a Resident Holder must be included in the income of the Resident Holder. One-half of any capital loss realized by a Resident Holder is deductible against the taxable portion of capital gains realized in the year, in the three preceding years or in subsequent years, subject to the rules and restrictions contained in the Tax Act. Capital gains realized by an individual may give rise to a liability for alternative minimum tax.

#### Redemption or Repayment by the Bank

A Resident Holder who holds the Securities until maturity (or earlier redemption or repayment in full by the Bank) and who receives redemption or repayment proceeds that are less than the Principal Amount of the Securities will realize a capital loss to the extent that the amount received at such time (otherwise than on account of interest) is less than the Resident Holder's adjusted cost base of such Securities. The income tax considerations associated with the realization of a capital loss are described above.

#### **Holders Not Resident in Canada**

The following discussion applies to a Holder who, at all relevant times, for the purposes of the Tax Act is neither resident nor deemed to be resident in Canada, deals at arm's length with any Canadian resident (or deemed Canadian resident) to whom the Holder disposes of the Securities, is neither a "specified shareholder" of the Bank nor a person who does not deal at arm's length with a specified shareholder of the Bank for purposes of the "thin capitalization" rule contained in subsection 18(4) of the Tax Act, does not use or hold and is not deemed to use or hold the Securities in the course of carrying on a business in Canada and is not an insurer carrying on an insurance business in Canada and elsewhere (a "Non-Resident Holder").

Interest paid or credited or deemed to be paid or credited on the Securities (including any interest deemed to be paid in certain cases involving the assignment or other transfer of a Security to a resident or deemed resident of Canada) to a Non-Resident Holder will not be subject to Canadian non-resident withholding tax unless any portion of such interest is contingent or dependent on the use of or production from property in Canada or is computed by reference to revenue, profit, cash flow, commodity price or any other similar criterion or by reference to dividends paid or payable to shareholders of any class of shares of the capital stock of a corporation ("Participating Debt Interest"). Having regard to the terms of the Securities, interest paid or credited or deemed to be paid or credited on the Securities should not be considered to be Participating Debt Interest.

There should be no other taxes on income (including taxable capital gains) payable by a Non-Resident Holder in respect of a Security.

#### **Eligibility for Investment**

The Securities, if issued on the date of this pricing supplement, would be qualified investments (for purposes of the Tax Act) for trusts governed by registered retirement savings plans ("RRSPs"), registered retirement income funds ("RRIFs"), tax-free savings accounts ("TFSAs"), registered disability savings plans ("RDSPs"), registered education savings plans ("RESPs") and deferred profit sharing plans ("DPSPs"), each within the meaning of the Tax Act (other than a DPSP to which payments are made by the Bank or a corporation or partnership with which the Bank does not deal at arm's length within the meaning of the Tax Act).

Notwithstanding the foregoing, if Securities are "prohibited investments" (as that term is defined in the Tax Act) for an RRSP, RRIF, TFSA, RDSP or RESP, the annuitant of the RRSP or RRIF, the holder of the TFSA or RDSP, or the subscriber of the RESP, as the case may be (each a "Plan Holder"), will be subject to a penalty tax as set out in the Tax Act. Securities will be prohibited investments for an RRSP, RRIF, TFSA, RDSP or RESP of a Plan Holder who has a "significant interest" (as defined in the Tax Act for purposes of the prohibited investment rules) in the Bank or who does not deal at arm's length, within the meaning of the Tax Act, with the Bank.