

**Pricing Supplement to Short Form Base Shelf Prospectus dated March 25, 2022, the Prospectus Supplement thereto dated March 28, 2022, as supplemented November 11, 2022 and March 2, 2023 and the Prospectus Supplement thereto dated March 28, 2022, as supplemented November 11, 2022 and March 2, 2023**

*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 March 25, 2022, the prospectus supplement dated March 28, 2022 and the prospectus supplement dated March 28, 2022, 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  
Equity Linked Securities  
Maximum US\$20,000,000 (200,000 Debt Securities)  
RBC North American Equity Basket Autocallable 10.50% Securities  
(USD), Series 187  
Due July 10, 2028  
Non-Principal Protected Securities**

**June 21, 2023**

Royal Bank of Canada (the “**Bank**”) is offering up to US\$20,000,000 of RBC North American Equity Basket Autocallable 10.50% Securities (USD), Series 187 (which we refer to as the “**Debt Securities**”), designed for investors who are prepared and can afford to take the risk that they will lose substantially all of their investment and the Interest Payment (defined herein) will not be made on the Debt Securities, because they believe that the Portfolio Value (defined herein) will be greater than or equal to the Autocall Redemption Value (defined herein) on an Observation Date (defined herein), and, in any event, greater than or equal to the Protection Barrier Value (defined herein) on the Final Valuation Date (defined herein). Payment at maturity will be based on the price performance of the common shares of the ten North American companies listed in Appendix A. The Debt Securities will be redeemed and the holders of the Debt Securities will receive an Interest Payment on the applicable Interest Payment Date (defined herein) if there is an Autocall Redemption Event (defined herein) on the immediately preceding Observation Date. The return on the Debt Securities is limited; even if the Debt Securities are not redeemed prior to maturity, an Autocall Redemption Event occurs on the final Observation Date and the Final Portfolio Value (defined herein) is greater than or equal to the Autocall Redemption Value, the maximum return on the Debt Securities would be equal to US\$52.50 per Debt Security plus an amount equal to the Principal Amount (defined herein) multiplied by 5.00% of any Percentage Change (defined herein) in excess of 52.50%.

The Portfolio (defined herein) is notional only, meaning that the Underlying Securities (defined herein) in the Portfolio will be used solely as a reference to calculate the amount payable on the Debt Securities. Holders of Debt Securities do not have an ownership interest or other interest (including, without limitation, redemption rights (if any), voting rights or rights to receive dividends or other distributions) in the shares in the Portfolio and will only have a right against the Bank to be paid any amounts due under the Debt Securities. All actions (e.g., purchases, sales and liquidations, etc.) taken in connection with the Portfolio are notional actions only.

The initial estimated value of the Debt Securities as of June 16, 2023 was US\$94.35 per Debt 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 Debt 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 Debt Securities are described in this pricing supplement delivered together with our short form base shelf prospectus dated March 25, 2022 (the “**base shelf prospectus**”), the prospectus supplement establishing our Senior Note Program dated March 28, 2022, as supplemented November 11, 2022 and March 2, 2023 (the “**program supplement**”) and a prospectus supplement which generally describes equity, unit and debt linked securities that we may offer under our Senior Note Program dated March 28, 2022, as supplemented November 11, 2022 and March 2, 2023 (the “**product supplement**”).

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

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

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

**An investment in the Debt Securities involves risks. An investment in the Debt Securities is not the same as a direct investment in the securities that comprise the Portfolio and investors have no rights with respect to the securities in the Portfolio. The Debt Securities are considered to be “specified derivatives” under applicable Canadian securities laws. If you purchase Debt Securities, you will be exposed to fluctuations in interest rates and changes in the Portfolio Value, among other factors. Price changes may be volatile and an investment in the Debt Securities may be considered to be speculative. Since the Debt Securities are not principal protected and the Principal Amount will be at risk, you could lose substantially all of your investment. See “Risk Factors”.**

Price: US\$100 per Debt Security  
Minimum Subscription: US\$5,000 (50 Debt Securities)

	Price to public	Selling Commissions and Dealer's fee <sup>(1)</sup>	Net proceeds to the Bank
Per Debt Security	US\$100.00	US\$2.75	US\$97.25
Total <sup>(2)</sup>	US\$20,000,000	US\$550,000	US\$19,450,000

(1) A commission of 2.75% of the Principal Amount of Debt 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 Debt Securities. An agency fee will also be paid, from the Bank's own funds, to Raymond James Ltd. in an amount up to 0.15% of the Principal Amount of the Debt Securities issued under this offering for acting as independent agent.

(2) Reflects the maximum offering size for the Debt 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 Debt Securities are offered severally by RBC Dominion Securities Inc. ("RBC DS") and Raymond James Ltd. (collectively, the "Dealers") as agents under a dealer agreement dated March 28, 2022, 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 Debt Securities will not be listed on any stock exchange. Debt 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 Debt Securities. The Debt Securities will also be subject to specified early trading charges, depending on when the Debt Securities are sold.

There is no assurance that a secondary market for the Debt 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.

#### **Bank Trademarks**

Lion & Globe symbol is a registered trademark of Royal Bank of Canada.

## Prospectus for Debt Securities

Debt Securities described in this pricing supplement will be issued under our Senior Note Program and will be unsecured, unsubordinated debt obligations. The Debt 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 Debt 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 Debt 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 Debt 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 June 21, 2023 is deemed to be incorporated by reference into the base shelf prospectus solely for the purpose of our Senior Note Program and the Debt 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 Debt 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 Debt 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 and six months periods ended or as at April 30, 2023 (the “**Q2 2023 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, 2022 (the “**2022 Management’s Discussion and Analysis**”) for Canadian, U.S., U.K., European and global economies, the regulatory environment in which we operate, the impact from rising interest rates, the expected closing of the transaction involving HSBC Bank Canada, the expected closing of the transaction involving CACEIS and the risk environment including our credit risk, market risk, liquidity and funding risk, 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”, “commit”, “target”, “objective”, “plan” and “project” and similar expressions of future or conditional verbs such as “will”, “may”, “might”, “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, that our financial performance, environmental & social or other objectives, vision and strategic goals will not be achieved and that our actual results may differ materially from such predictions, forecasts, projections, expectations or conclusions. 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, model, legal and regulatory environment, systemic risks and other risks discussed in the risk sections of the 2022 Management’s Discussion and Analysis and the Risk management section of the Q2

2023 Management's Discussion and Analysis incorporated by reference herein; including business and economic conditions in the geographic regions in which we operate, Canadian housing and household indebtedness, information technology and cyber risks, geopolitical uncertainty, environmental and social risk (including climate change), digital disruption and innovation, privacy, data and third-party related risks, regulatory changes, culture and conduct risks, 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. Additional factors that could cause actual results to differ materially from the expectations in such forward-looking statements can be found in the risk sections of the 2022 Management's Discussion and Analysis.

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 Debt 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 sections in our 2022 Management's Discussion and Analysis, as updated by the Economic, market and regulatory review and outlook section of the Q2 2023 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 of the 2022 Management's Discussion and Analysis and in the Risk management section of the Q2 2023 Management's Discussion and Analysis incorporated by reference in this prospectus.

**Royal Bank of Canada**  
**Senior Note Program**  
**Equity Linked Securities**  
**Maximum US\$20,000,000 (200,000 Debt Securities)**  
**RBC North American Equity Basket Autocallable 10.50% Securities (USD), Series 187**  
**Due July 10, 2028**  
**Non-Principal Protected Securities**

<b>Issuer:</b>	Royal Bank of Canada (the “ <b>Bank</b> ”)
<b>Dealers:</b>	RBC Dominion Securities Inc. (“ <b>RBC DS</b> ”) and Raymond James Ltd. Raymond James Ltd., 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 Debt Securities. See “Plan of Distribution” in the program supplement.
<b>Issue:</b>	RBC North American Equity Basket Autocallable 10.50% Securities (USD), Series 187 due July 10, 2028.
<b>Fundserv Code:</b>	RBC10096
<b>Objective of the Debt Securities:</b>	The Debt 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 and that the Interest Payment (defined below) will not be made on the Debt Securities, because they believe that the Portfolio Value (defined below) will be greater than or equal to the Autocall Redemption Value (defined below) on an Observation Date (defined below), and, in any event, greater than or equal to the Protection Barrier Value (defined below) on the Final Valuation Date (defined below). The Debt Securities will be redeemed and the holders of the Debt Securities will receive an Interest Payment on the applicable Interest Payment Date (defined below) if there is an Autocall Redemption Event (defined below) on the immediately preceding Observation Date.
<b>Issue Price:</b>	The Debt Securities will be issued at a price equal to their Principal Amount (defined below).
<b>Minimum Investment:</b>	50 Debt Securities or US\$5,000.
<b>Denomination:</b>	Debt Securities are issuable in denominations of US\$100.00 (the “ <b>Principal Amount</b> ”) and in minimum increments of US\$100.00.
<b>Issue Date:</b>	July 11, 2023 or such other date as may be agreed to by the Bank and the Dealers.
<b>Issue Size:</b>	The maximum issue size will be an aggregate amount of US\$20,000,000.
<b>Maturity Date:</b>	July 10, 2028 (approximately a five-year term), subject to earlier redemption on an Autocall Redemption Event or earlier repayment in full on an Extraordinary Event. See “Description of the Equity, Unit and Debt Linked Securities – Maturity Date and Amount Payable” in the product supplement.
<b>Principal at Risk Securities:</b>	All but 1% of the Principal Amount of the Debt Securities is fully exposed. You could lose substantially all of your investment. See “Description of the Equity, Unit and Debt Linked Securities — Principal at Risk Securities” and “Risk Factors” in the product supplement.
<b>Underlying Securities:</b>	The return on the Debt Securities is linked to the price performance (excluding any dividends and other distributions) of a notional portfolio (the “ <b>Portfolio</b> ”) of the common shares (the “ <b>Underlying Securities</b> ” and each, an “ <b>Underlying Security</b> ”) of the ten North American companies listed in Appendix A (the “ <b>Underlying Security Issuers</b> ” and each, an “ <b>Underlying Security Issuer</b> ”) on the Initial Valuation Date (defined below) and the Observation Dates, including the Final Valuation Date. The Underlying Securities will be equally weighted in the Portfolio (the “ <b>Portfolio Weight</b> ”) at the Initial Valuation Date. Such weightings will not be adjusted or rebalanced during the term of the Debt Securities.

Debt Securities do not represent an interest in the Underlying Securities, and holders will have no right or entitlement to the Underlying Securities, including, without limitation, redemption rights (if any), voting rights or rights to receive dividends and other distributions paid on any of such Underlying Securities (the annual dividend yield on the Portfolio as of June 16, 2023 was 3.09%, representing an aggregate dividend yield of approximately 16.43% compounded annually over the five-year term, on the assumption that the dividend yield remains constant). There is no requirement for the Bank to hold any interest in the Underlying Security Issuers.

This pricing supplement has been prepared for the sole purpose of assisting prospective investors in making an investment decision with respect to the Debt Securities. This pricing supplement relates only to the Debt Securities offered hereby and does not relate to the Underlying Securities and/or the Underlying Security Issuers. Additional information relating to the Underlying Securities and/or the Underlying Security Issuers can be obtained from the public disclosure filed by the Underlying Security Issuers on [www.sedar.com](http://www.sedar.com) (for the Canadian Imperial Bank of Commerce, the Bank of Nova Scotia, and Enbridge Inc.) or with the United States Securities and Exchange Commission on [www.sec.gov](http://www.sec.gov) (for the Walt Disney Company, Ford Motor Company, Meta Platforms, Inc., Amazon.com, Inc., Apple Inc., Alphabet Inc., and Home Depot, Inc.) or other publicly available sources. The Bank and the Dealers have not verified the accuracy or completeness of any information pertaining to the Underlying Security Issuers or determined if there has been any omission by any Underlying Security Issuer 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 any Underlying Security Issuer 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 Underlying Securities or Underlying Security Issuer are accurate or complete.

See Appendix A for information concerning the market price and certain other information regarding the common shares of each of the Underlying Security Issuers on the Toronto Stock Exchange (the “TSX”), the New York Stock Exchange (the “NYSE”), or the NASDAQ Stock Market (the “NASDAQ”), as applicable. Prospective investors should independently investigate the Underlying Security Issuers and decide whether an investment in the Debt Securities is appropriate. None of the Underlying Security Issuers have participated in the preparation of this pricing supplement and the Debt Securities are not in any way sponsored, endorsed, sold or promoted by any of the Underlying Security Issuers. See “Description of the Equity, Unit and Debt Linked Securities – Underlying Securities and Underlying Security Issuers” in the product supplement.

The decision to offer the Debt Securities pursuant to this supplement will have been taken independently of any decision by the Bank to purchase the Underlying Securities in the primary or secondary market. Except with respect to any hedging activities the Bank engages with respect to its obligations under the Debt Securities, any decision by the Bank to purchase the Underlying Securities in the primary or in the secondary market will have been taken independently of the Bank’s offering of the Debt Securities pursuant to this supplement. The employees responsible for the Bank’s Senior Note Program are not privy to any information regarding either primary or secondary market purchases of the Underlying Securities made by the Bank in connection with any primary distribution made by the Underlying Security Issuers.

**Portfolio Value:**

The “**Portfolio Value**” for the Portfolio on any Exchange Day (defined in the product supplement) is calculated by: (a) multiplying (i) the official closing price of each Underlying Security, as announced by the TSX, the NYSE or the NASDAQ, as applicable, on such Exchange Day by (ii) the corresponding Number of Underlying Securities (defined below) for such Underlying Security; and (b) aggregating the resulting products.

**Number of Underlying Securities:**

The “**Number of Underlying Securities**” for each Underlying Security is calculated by: (i) multiplying the Portfolio Weight for such Underlying Security by the aggregate

Principal Amount of Debt Securities issued under this offering; and (ii) dividing the resulting product by the official closing price of such Underlying Security, as announced by the TSX, the NYSE or the NASDAQ, as applicable, on the Initial Valuation Date. For the purposes of this calculation, the CAD/USD exchange rate will be deemed to be 1.000. Once determined, the Number of Underlying Securities for each Underlying Security will not be adjusted during the term of the Debt Securities, except in certain special circumstances. See “Extraordinary Events” below. Consequently, since there will be no further currency conversions during the term of the Debt Securities, holders will not be subject to any foreign currency risk.

**Protection Barrier Value:**

The “**Protection Barrier Value**” is 75.00% of the Initial Portfolio Value.

**Initial Portfolio Value:**

The “**Initial Portfolio Value**” is the Portfolio Value on July 5, 2023 (the “**Initial Valuation Date**”).

**Final Portfolio Value:**

The “**Final Portfolio Value**” is (i) if an Autocall Redemption Event occurs, the Portfolio Value on the applicable Observation Date or (ii) if no Autocall Redemption Event occurs, the Portfolio Value on July 5, 2028 (the “**Final Valuation Date**”).

**Percentage Change:**

The “**Percentage Change**” is the amount, expressed as a percentage rounded to two decimal places, equal to:

$$\frac{(\text{Final Portfolio Value} - \text{Initial Portfolio Value})}{\text{Initial Portfolio Value}}$$

See “Description of the Equity, Unit and Debt Linked Securities — Maturity Date and Amount Payable” in the product supplement.

**Observation Dates:**

An “**Observation Date**” for the purposes of determining whether an Autocall Redemption Event has occurred and whether the Interest Payment will be payable will occur annually on the dates specified below in each year that the Debt Securities are outstanding, from and including July 5, 2024 to and including the Final Valuation Date. If any such Observation Date is not an Exchange Day, it shall be postponed to the next succeeding Exchange Day.

Provided that an Autocall Redemption Event does not occur prior to the Final Valuation Date, the Bank intends the Observation Dates to be:

July 5, 2024	July 7, 2025
July 6, 2026	July 6, 2027
July 5, 2028 (the Final Valuation Date)	

**Interest Payment Dates:**

The “**Interest Payment Date**” for the Interest Payment, if any, will occur annually on the dates specified below in each year that the Debt Securities are outstanding, from and including July 10, 2024 to and including the Maturity Date. Provided that an Autocall Redemption Event does not occur prior to the Final Valuation Date, the Bank intends the Interest Payment Dates to be:

July 10, 2024	July 10, 2025
July 9, 2026	July 9, 2027
July 10, 2028 (the Maturity Date)	

For certainty, no Interest Payment will be made on any Interest Payment Date unless an Autocall Redemption Event occurred on the immediately preceding Observation Date.

**Autocall Redemption Event:**

An “**Autocall Redemption Event**” will occur if the Portfolio Value on an Observation Date is greater than or equal to the Initial Portfolio Value (the “**Autocall Redemption Value**”). On the next succeeding Interest Payment Date following the occurrence of an Autocall Redemption Event (the “**Autocall Redemption Date**”) the Debt Securities will be redeemed for an amount equal to the Principal Amount thereof (the “**Autocall Redemption Amount**”).

If an Autocall Redemption Event occurs, in addition to the Autocall Redemption Amount, an interest payment (the “**Interest Payment**”) on the Debt Securities will be payable on the next succeeding Autocall Redemption Date, in arrears, as follows:

(a) if an Autocall Redemption Event occurs on the first Observation Date, the Interest Payment payable per Debt Security will be equal to the sum of (i) US\$10.50 and (ii) if the Percentage Change exceeds 10.50%,  $5.00\% \times (\text{US\$100.00} \times \text{Percentage Change} - \text{US\$10.50})$ ;

(b) if an Autocall Redemption Event occurs on the second Observation Date, the Interest Payment payable per Debt Security will be equal to the sum of (i) US\$21.00 and (ii) if the Percentage Change exceeds 21.00%,  $5.00\% \times (\text{US\$100.00} \times \text{Percentage Change} - \text{US\$21.00})$ ;

(c) if an Autocall Redemption Event occurs on the third Observation Date, the Interest Payment payable per Debt Security will be equal to the sum of (i) US\$31.50 and (ii) if the Percentage Change exceeds 31.50%,  $5.00\% \times (\text{US\$100.00} \times \text{Percentage Change} - \text{US\$31.50})$ ;

(d) if an Autocall Redemption Event occurs on the fourth Observation Date, the Interest Payment payable per Debt Security will be equal to the sum of (i) US\$42.00 and (ii) if the Percentage Change exceeds 42.00%,  $5.00\% \times (\text{US\$100.00} \times \text{Percentage Change} - \text{US\$42.00})$ ; or

(e) if an Autocall Redemption Event occurs on the Final Valuation Date, the Interest Payment payable per Debt Security on the Maturity Date will be equal to the sum of (i) US\$52.50 and (ii) if the Percentage Change exceeds 52.50%,  $5.00\% \times (\text{US\$100.00} \times \text{Percentage Change} - \text{US\$52.50})$ .

If an Autocall Redemption Event does not occur on an Observation Date, no Interest Payment will be payable on the Debt Securities on the next succeeding Autocall Redemption Date.

RBC DS intends to publish whether there has been an Autocall Redemption Event on each Observation Date on its website at [www.rbcnotes.com](http://www.rbcnotes.com).

#### **Payment at Maturity:**

On the Maturity Date, if an Autocall Redemption Event has not previously occurred, the amount payable (the “**Final Redemption Amount**”) for each US\$100.00 Principal Amount per Debt Security will be equal to:

(a) if the Final Portfolio Value is greater than or equal to the Protection Barrier Value, US\$100.00; or

(b) if the Final Portfolio Value is less than the Protection Barrier Value, an amount equal to:

$$\text{US\$100.00} + (\text{US\$100.00} \times \text{Percentage Change})$$

As a result, the Final Redemption Amount will not be determinable before the Final Valuation Date. See “Risk Factors” below. All dollar amounts will be rounded to the nearest whole cent. The minimum payment at maturity is US\$1.00.

#### **Sample Calculations:**

See Appendix B to this pricing supplement for sample calculations of the Final Redemption Amount or Autocall Redemption Amount (in the event of an Autocall Redemption Event) and the Interest Payment payable on the Debt Securities (in the event of an Autocall Redemption Event).

#### **Issuer Credit Rating:**

Moody’s: Aa1

Standard & Poor’s: AA-

DBRS: AA

The Debt 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 Portfolio Value, including the Initial Portfolio Value and/or the Final Portfolio Value, and the Final Redemption Amount may be postponed, or the Bank can accelerate determination of the Final Portfolio Value and the Final Redemption Amount and repay the Debt 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 Debt Securities as it determines to be appropriate, acting in good faith, to account for the economic effect of such event on the Debt 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 Equity, Unit and Debt Linked Securities — Extraordinary Events” in the product supplement.

**Summary of Fees and Expenses:**

A commission of 2.75% of the Principal Amount of Debt Securities issued under this offering will be paid to the Dealers for further payment to representatives, including representatives employed by the Dealers, whose clients purchase the Debt Securities. An agency fee will also be paid, from the Bank’s own funds, to Raymond James Ltd. in an amount up to 0.15% of the Principal Amount of the Debt Securities issued under this offering for acting as independent agent. The selling commissions and the agency fee are indirectly borne by holders of the Debt Securities. There are no fees directly payable by a holder of Debt 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, FHSAs, DPSPs and TFSA. See “Eligibility for Investment” in Appendix C, including the summary of the “prohibited investment” rule.

**Risk Factors:**

You should carefully consider all the information set out in this prospectus for any Debt 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 Debt Securities is unknown and subject to many variables, including interest rate fluctuations and changes in the prices of the Underlying Securities. You should independently determine, with your own advisors, whether an investment in the Debt Securities is suitable for you having regard to your own investment objectives and expectations.

*Limited Upside Participation by the Debt Securities*

The return on the Debt Securities is limited; even if the Portfolio Value is less than the Autocall Redemption Value on each of the first four Observation Dates and the Final Portfolio Value is greater than or equal to the Autocall Redemption Value, the maximum return on the Debt Securities would be equal to US\$52.50 per Debt Security plus an amount equal to the Principal Amount multiplied by 5.00% of any Percentage Change in excess of 52.50%. The Debt Securities will only participate in this 5.00% upside price performance of the Portfolio in excess of 52.50%.

*Uncertain Return Until Final Valuation Date*

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

*Volatility May Affect the Return on or Trading Value of the Debt 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 the Underlying Securities changes over the term of the Debt Securities, the trading value of the Debt Securities may be adversely affected. In addition, if the Portfolio Value on an Observation Date is less than the Autocall Redemption Value, you will not receive an Interest Payment on the relevant Interest Payment Date and if there is no early redemption and the Final Portfolio Value is less than the Protection Barrier Value, 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 the Interest Payment or a return of the full Principal Amount of the Debt Securities increases.

*The Debt Securities May be Redeemed Prior to the Maturity Date*

The Debt Securities will be automatically redeemed by the Bank on the Autocall Redemption Date if the Portfolio Value on an Observation Date is greater than or equal to the Autocall Redemption Value. In such event, investors will receive an Autocall Redemption Amount equal to the Principal Amount of the Debt Securities and will also receive the applicable Interest Payment. If the Debt Securities are redeemed by the Bank prior to maturity, investors will not be entitled to receive any future Interest Payment that they may have been entitled to receive if the Debt Securities had not been redeemed by the Bank.

*The Initial Estimated Value of the Debt Securities Is Less than the Price to the Public and May not Reflect the Secondary Market Price, if any, of the Debt 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 Debt Securities in any secondary market (if any exists) at any time. If you attempt to sell the Debt 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 prices of the Underlying Securities 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 Debt 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 Debt Securities, could reduce the price at which you may be able to sell the Debt Securities in any secondary market and will affect the value of the Debt 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 Debt Securities prior to maturity may be less than your original purchase price. The Debt Securities are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your Debt Securities to maturity.

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

The initial estimated value of the Debt Securities is based on the value of the Bank's obligation to make the payments on the Debt Securities. The return on the Debt 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 Debt Securities is equal to the fair value of the Debt 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 Debt 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 Debt Securities or similar securities at a price that is significantly different than the Bank does. The value of the Debt 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 Debt Securities in the secondary market, if any, should be expected to differ materially from the initial estimated value of the Debt Securities.

**Preparation of Initial Estimated Value:**

The Debt Securities are debt securities of the Bank, the return on which is linked to the price performance of the Portfolio. In order to satisfy the Bank's payment obligations under the Debt 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 Underlying Securities, and the term to maturity and any earlier call date of the Debt Securities.

The price of the Debt 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 Debt Securities (which may or may not also include any costs of its hedging obligations thereunder). The initial estimated value for the Debt Securities shown on the cover page will therefore be less than their public offering price. See "Risk Factors – The Initial Estimated Value of the Debt Securities Is Less than the Price to the Public and May not Reflect the Secondary Market Price, if any, of the Debt Securities" above.

The Bank has adopted written policies and procedures for determining the fair value of Debt 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 Debt 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 Debt Securities. The Debt Securities may be suitable for:

- investors seeking an investment product with exposure to the common shares of a portfolio of ten North American companies
- investors who believe that the Portfolio Value will be greater than or equal to the Autocall Redemption Value on an Observation Date
- investors who believe that the Final Portfolio Value will not be below the Protection Barrier Value
- 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 Portfolio and who are prepared to assume the risks associated with an investment linked to the price performance of the Portfolio
- investors with an investment horizon equal to the term to maturity of the Debt Securities who are prepared to hold the Debt Securities until maturity, but who are willing to assume the risk that the Debt Securities will be redeemed prior to the Maturity Date if the Portfolio Value is greater than or equal to the Autocall Redemption Value on one of the first four Observation Dates
- investors who are prepared to take the risk that the Interest Payment will not be paid on the Debt Securities
- investors who understand that the potential return on the Debt Securities is limited; the maximum return on the Debt Securities is equal to US\$52.50 per Debt Security, plus an amount equal to the Principal Amount multiplied by 5.00% of any Percentage Change in excess of 52.50%

**Book-entry Only Securities:**

The Debt 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 Debt 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 and the Interest Payment (in the event of an Autocall Redemption Event) will be paid by the Bank to the registered holder.

**Listing:**

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

**Secondary Market:**

Debt Securities may be purchased through dealers and other firms that facilitate purchase and related settlement using the Fundserv network. Debt 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 Debt Securities, 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 Debt Securities Is Less than the Price to the Public and May not Reflect the Secondary Market Price, if any, of the Debt Securities” above and “Secondary Market for Securities – Fundserv” in the program supplement.

Information regarding the Portfolio Value, the Autocall Redemption Value, the Protection Barrier Value and the daily closing price for the Debt Securities may be accessed at [www.rbcnotes.com](http://www.rbcnotes.com). There is no assurance that a secondary market for the Debt Securities will develop or be sustained. See “Secondary Market for Securities” in the program supplement.

If a Debt Security is sold within the first 270 days from the Issue Date, the proceeds from the sale of the Debt 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 – 60 days	3.25%
61 – 90 days	2.75%
91 – 120 days	2.25%
121 – 180 days	1.75%
181 – 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 Debt Securities who acquires Debt 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 Debt Securities as capital property is referred to herein as a “**Resident Holder**”. A Resident Holder will be required to include in income, on a transfer of a Debt Security (other than to the Bank), the excess, if any, of the price for which it was so transferred by the Resident Holder over its principal amount at the time of the transfer. Furthermore, a Resident Holder will be required to include in computing income any Interest Payment received or receivable on the Debt Securities. If, on maturity or other disposition (including on early redemption or repayment in full by the Bank), such a Resident Holder receives an amount that is less than the adjusted cost base of the Debt Securities, such holder will realize a capital loss equal to the shortfall. All amounts relating to the acquisition, holding or disposition of the Debt Securities must be converted into Canadian dollars on the relevant day for Canadian income tax purposes. See “Certain Canadian Tax Considerations” in Appendix C. **Potential purchasers of Debt Securities should consult with their own tax advisors having regard to their particular circumstances.**

## APPENDIX A

### Certain Information Concerning the Common Shares of each of the Underlying Security Issuers

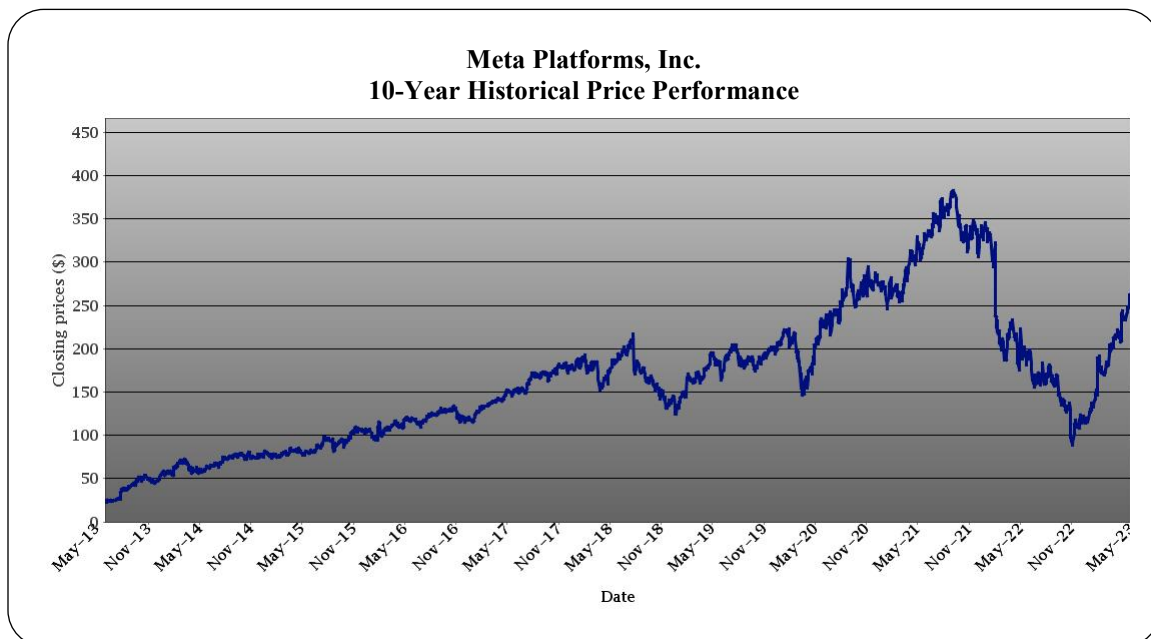
Entity Name	Symbol	Exchange	Portfolio Weight	Closing Prices (as of June 16, 2023)
Meta Platforms, Inc.	META	NASDAQ	10%	US\$281.00
Amazon.com, Inc.	AMZN	NASDAQ	10%	US\$125.49
The Bank of Nova Scotia	BNS	TSX	10%	\$66.21
Ford Motor Company	F	NYSE	10%	US\$14.42
Enbridge Inc.	ENB	TSX	10%	\$49.47
Apple Inc.	AAPL	NASDAQ	10%	US\$184.92
Canadian Imperial Bank of Commerce	CM	TSX	10%	\$58.26
Alphabet Inc.	GOOGL	NASDAQ	10%	US\$123.53
The Home Depot, Inc.	HD	NYSE	10%	US\$300.38
The Walt Disney Company	DIS	NYSE	10%	US\$91.32

#### **Meta Platforms, Inc.**

Meta Platforms, Inc. operates as a social technology company. Meta Platforms, Inc. builds applications and technologies that help people connect, find communities, and grow businesses. Meta Platforms, Inc. is also involved in advertisements, augmented, and virtual reality. Meta Platforms, Inc.'s common shares are listed on the NASDAQ under the symbol "META". The annual dividend yield of the common shares of Meta Platforms, Inc. as of June 16, 2023 was 0.00%.

#### **Historical Price Performance**

The following chart sets forth the historical price performance of the common shares of Meta Platforms, Inc. for the period from May 31, 2013 to May 31, 2023. Historical price performance does not take into account distributions or dividends paid on the Underlying Securities.



All dollar amounts in graph in US\$.

**Historical price performance of the common shares of Meta Platforms, Inc. will not necessarily predict future price performance of the common shares of Meta Platforms, Inc. or the Debt Securities.** The source of the data displayed in this chart is Bloomberg L.P. and its accuracy cannot be guaranteed.

<b>Historical annual percentage change of the common shares of Meta Platforms, Inc.</b>										
Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Percentage change (%)	105.26	42.74	34.15	9.93	53.38	-25.71	56.57	33.09	23.13	-64.22

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

**Amazon.com, Inc.**

Amazon.com, Inc. is an online retailer that offers a wide range of products. Amazon.com, Inc. products include books, music, videotapes, computers, electronics, home and garden, and numerous other products. Amazon.com, Inc. offers personalized shopping services, Web-based credit card payment, and direct shipping to customers. Amazon also operates a cloud platform offering services globally. Amazon.com, Inc.’s common shares are listed on the NASDAQ under the symbol “AMZN”. The annual dividend yield of the common shares of Amazon.com, Inc. as of June 16, 2023 was 0.00%.

**Historical Price Performance**

The following chart sets forth the historical price performance of the common shares of Amazon.com, Inc. for the period from May 31, 2013 to May 31, 2023. Historical price performance does not take into account distributions or dividends paid on the Underlying Securities.



All dollar amounts in graph in US\$.

**Historical price performance of the common shares of Amazon.com, Inc. will not necessarily predict future price performance of the common shares of Amazon.com, Inc. or the Debt 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 common shares of Amazon.com, Inc.										
Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Percentage change (%)	58.79	-22.18	117.78	10.95	55.96	28.43	23.03	76.26	2.38	-49.62

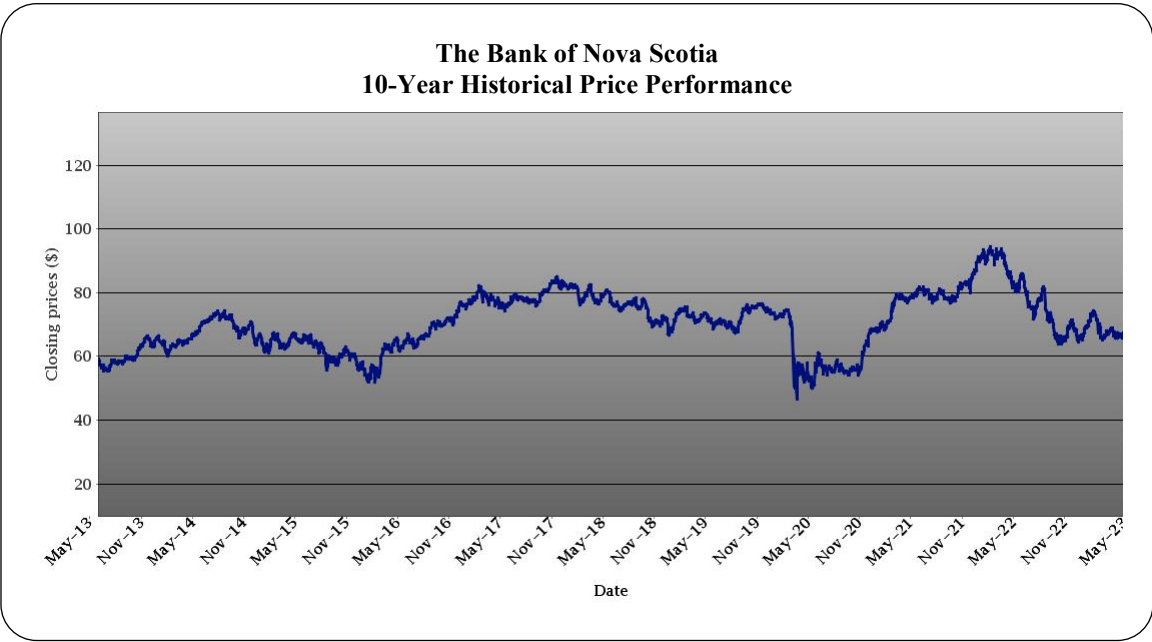
Source: Bloomberg L.P.: Measures annualized period as of December 31 of the previous year.

**The Bank of Nova Scotia**

The Bank of Nova Scotia provides retail, commercial, international, corporate, investment and private banking services and products. The Bank of Nova Scotia’s common shares are listed on the TSX under the symbol “BNS”. The annual dividend yield of the common shares of The Bank of Nova Scotia as of June 16, 2023 was 6.22%.

**Historical Price Performance**

The following chart sets forth the historical price performance of the common shares of The Bank of Nova Scotia for the period from May 31, 2013 to May 31, 2023. Historical price performance does not take into account distributions or dividends paid on the Underlying Securities.



**Historical price performance of the common shares of The Bank of Nova Scotia will not necessarily predict future price performance of the common shares of The Bank of Nova Scotia or the Debt 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 common shares of The Bank of Nova Scotia										
Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Percentage change (%)	15.61	-0.18	-15.59	33.57	8.51	-16.11	7.79	-6.20	30.16	-25.92

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

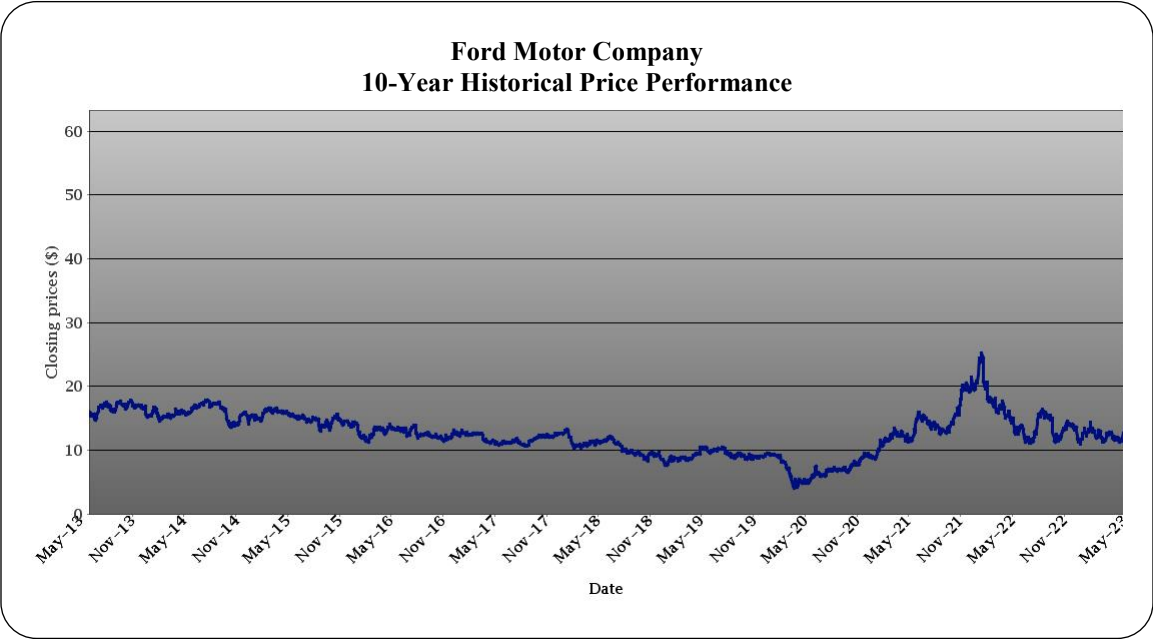


**Ford Motor Company**

Ford Motor Company designs, manufactures, and services cars and trucks. Ford Motor Company also provides vehicle-related financing, leasing, and insurance through its subsidiary. Ford Motor Company’s common stock is listed on the NYSE under the symbol “F”. The annual dividend yield of the common shares of Ford Motor Company as of June 16, 2023 was 8.67%.

**Historical Price Performance**

The following chart sets forth the historical price performance of the common shares of Ford Motor Company for the period from May 31, 2013 to May 31, 2023. Historical price performance does not take into account distributions or dividends paid on the Underlying Securities.



All dollar amounts in graph in US\$.

**Historical price performance of the common shares of Ford Motor Company will not necessarily predict future price performance of the common shares of Ford Motor Company or the Debt 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 common shares of Ford Motor Company										
Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Percentage change (%)	19.15	0.45	-9.10	-13.91	2.97	-38.75	21.57	-5.48	136.29	-44.01

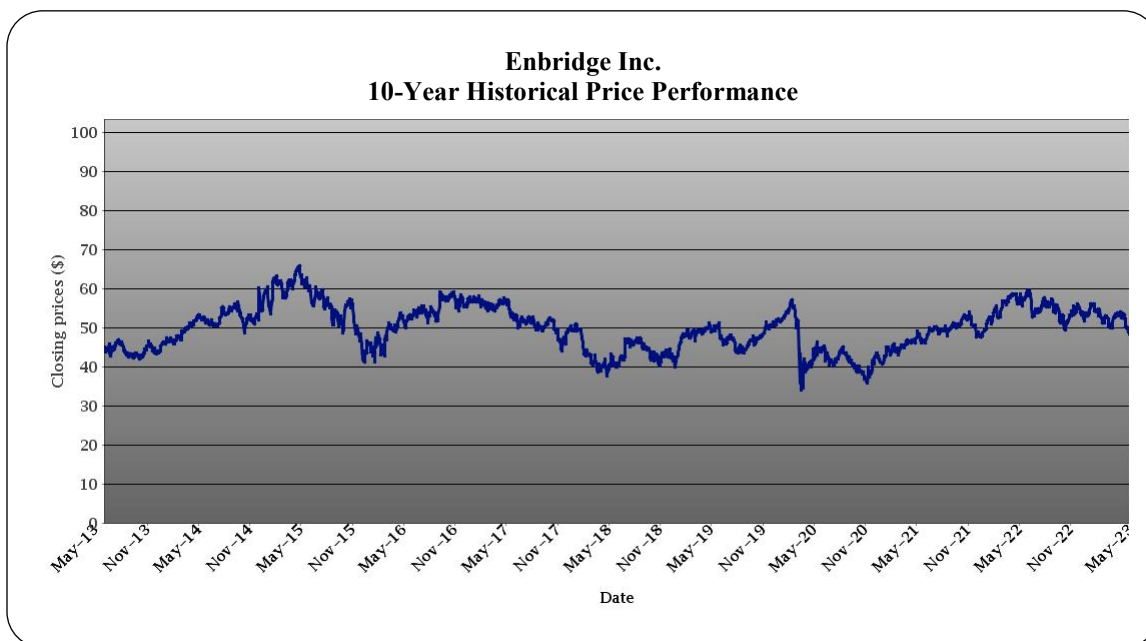
Source: Bloomberg L.P.: Measures annualized period as of December 31 of the previous year.

## Enbridge Inc.

Enbridge Inc. provides energy transportation, distribution, and related services in North America and internationally. Enbridge Inc. operates a crude oil and liquids pipeline system and, is involved in: (i) international energy projects, and (ii) natural gas transmission and midstream businesses. Enbridge Inc. also distributes natural gas and electricity, and provides retail energy products. Enbridge Inc.'s common shares are listed on the TSX under the symbol "ENB". The annual dividend yield of the common shares of Enbridge Inc. as of June 16, 2023 was 7.06%.

### Historical Price Performance

The following chart sets forth the historical price performance of the common shares of Enbridge Inc. for the period from May 31, 2013 to May 31, 2023. Historical price performance does not take into account distributions or dividends paid on the Underlying Securities.



**Historical price performance of the common shares of Enbridge Inc. will not necessarily predict future price performance of the common shares of Enbridge Inc. or the Debt 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 common shares of Enbridge Inc.										
Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Percentage change (%)	7.88	28.72	-23.00	22.83	-12.99	-13.73	21.74	-21.15	21.37	7.10

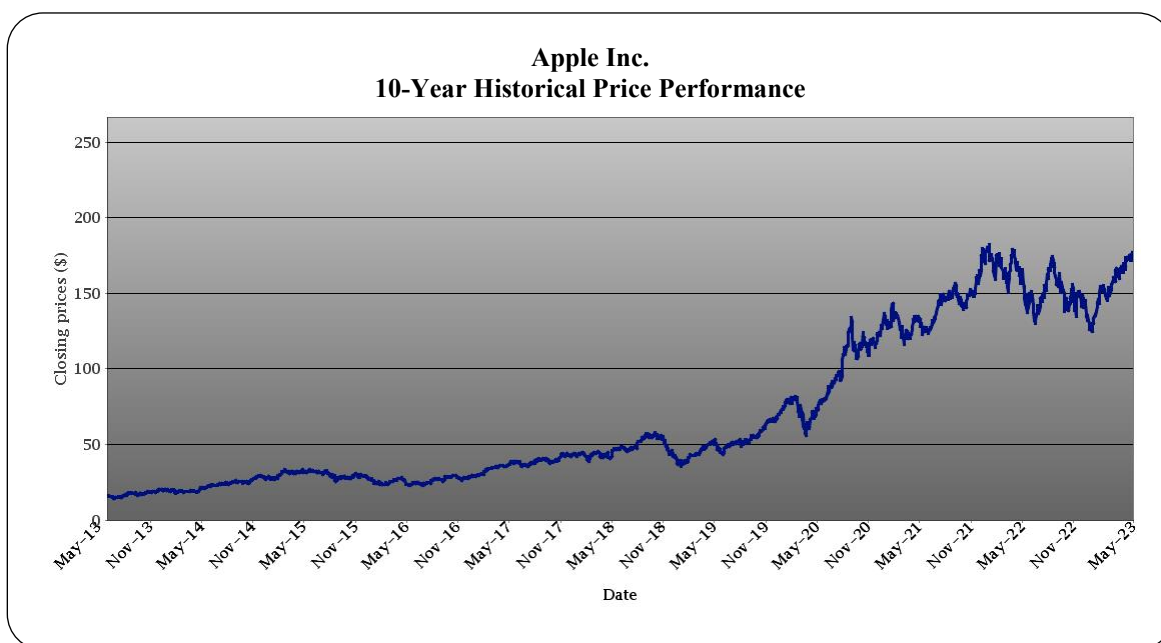
Source: Bloomberg L.P.: Measures annualized period as of December 31 of the previous year.

## Apple Inc.

Apple Inc. designs, manufactures, and markets smartphones, personal computers, tablets, wearables and accessories, and sells a variety of related accessories. Apple Inc. also offers payment, digital content, cloud and advertising services. Apple Inc.'s customers are primarily in consumer, small & mid-sized business, education, enterprise and government markets worldwide. Apple Inc.'s common shares are listed on the NASDAQ under the symbol "AAPL". The annual dividend yield of the common shares of Apple Inc. as of June 16, 2023 was 0.50%.

### Historical Price Performance

The following chart sets forth the historical price performance of the common shares of Apple Inc. for the period from May 31, 2013 to May 31, 2023. Historical price performance does not take into account distributions or dividends paid on the Underlying Securities.



All dollar amounts in graph in US\$.

**Historical price performance of the common shares of Apple Inc. will not necessarily predict future price performance of the common shares of Apple Inc. or the Debt 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 common shares of Apple Inc.										
Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Percentage change (%)	5.27	37.70	-4.64	10.03	46.11	-6.79	86.16	80.75	33.82	-26.83

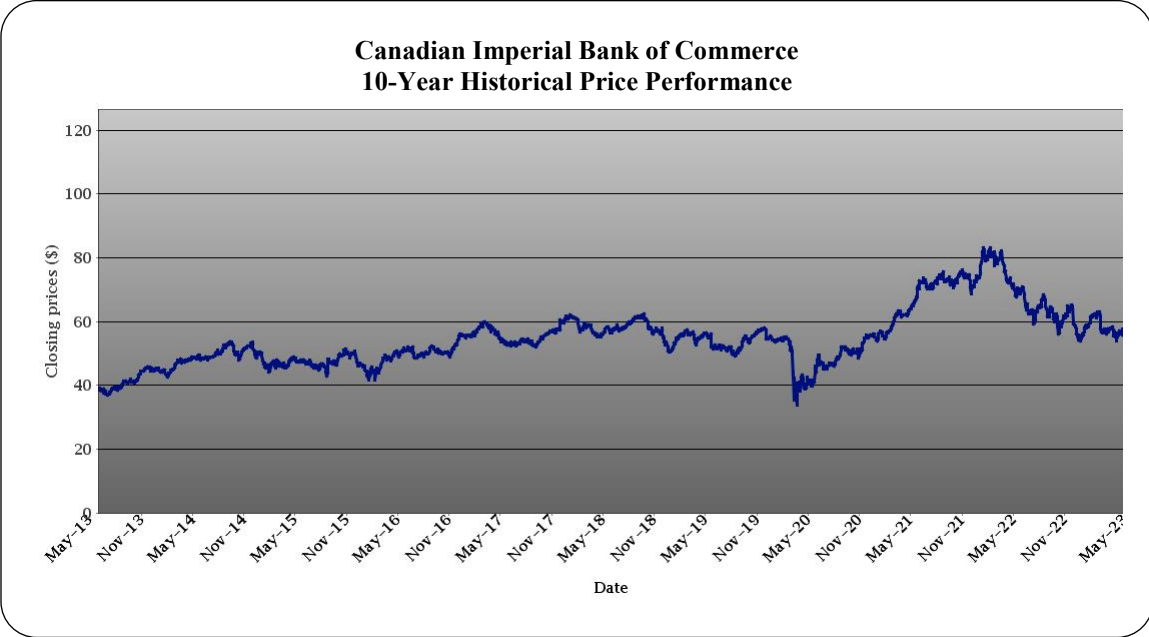
Source: Bloomberg L.P.: Measures annualized period as of December 31 of the previous year.

**Canadian Imperial Bank of Commerce**

Canadian Imperial Bank of Commerce provides banking and financial services to consumers, individuals, and corporate clients in Canada and around the world. Canadian Imperial Bank of Commerce’s common shares are listed on the TSX under the symbol “CM”. The annual dividend yield of the common shares of Canadian Imperial Bank of Commerce as of June 16, 2023 was 5.77%.

**Historical Price Performance**

The following chart sets forth the historical price performance of the common shares of Canadian Imperial Bank of Commerce for the period from May 31, 2013 to May 31, 2023. Historical price performance does not take into account distributions or dividends paid on the Underlying Securities.



**Historical price performance of the common shares of Canadian Imperial Bank of Commerce will not necessarily predict future price performance of the common shares of Canadian Imperial Bank of Commerce or the Debt 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 common shares of Canadian Imperial Bank of Commerce										
Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Percentage change (%)	13.44	10.05	-8.66	20.14	11.85	-17.02	6.27	0.61	35.62	-25.71

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

## Alphabet Inc.

Alphabet Inc. operates as a holding company. Alphabet Inc., through its subsidiaries, provides web-based search, advertisements, maps, software applications, mobile operating systems, consumer content, enterprise solutions, commerce, and hardware products. Alphabet Inc.'s Class A common shares are listed on the NASDAQ under the symbol "GOOGL". The annual dividend yield of the Class A common shares of Alphabet Inc. as of June 16, 2023 was 0.00%.

### Historical Price Performance

The following chart sets forth the historical price performance of the Class A common shares of Alphabet Inc. for the period from May 31, 2013 to May 31, 2023. Historical price performance does not take into account distributions or dividends paid on the Underlying Securities.



All dollar amounts in graph in US\$.

**Historical price performance of the Class A common shares of Alphabet Inc. will not necessarily predict future price performance of the Class A common shares of Alphabet Inc. or the Debt 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 Class A common shares of Alphabet Inc.										
Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Percentage change (%)	57.99	-5.39	46.61	1.86	32.93	-0.80	28.18	30.85	65.30	-39.09

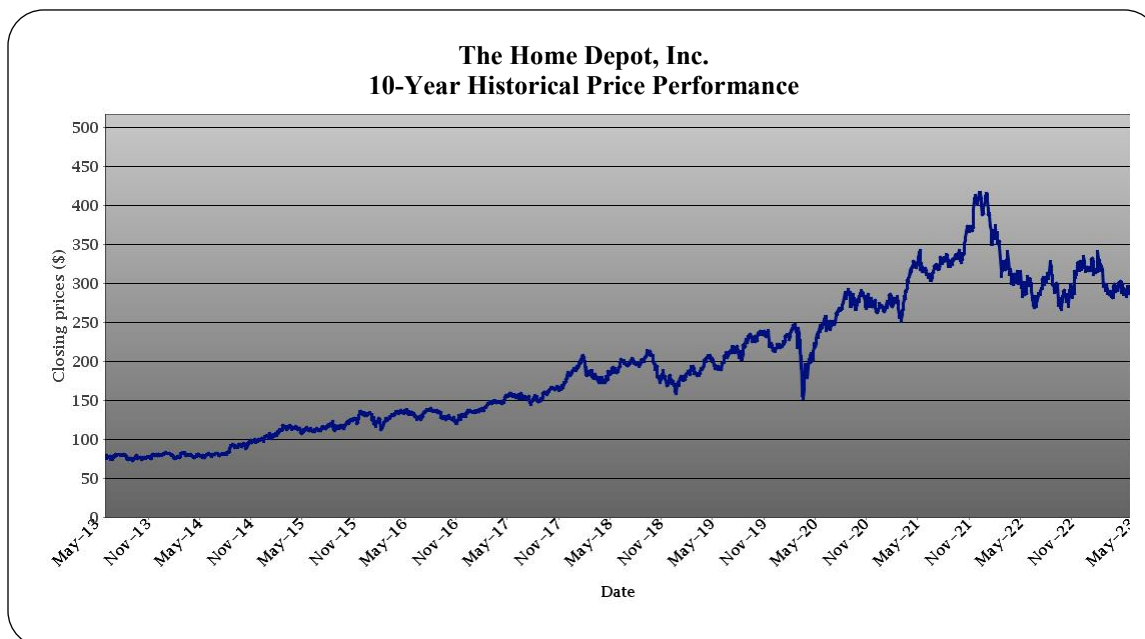
Source: Bloomberg L.P.: Measures annualized period as of December 31 of the previous year.

## The Home Depot, Inc.

The Home Depot, Inc. is a home improvement retailer. The Home Depot, Inc. offers wide range of building materials, home improvement, lawn, and garden products, as well as provides DIY ideas, installation, repair, and other services. Home Depot serves customers worldwide. The Home Depot, Inc.'s common stock is listed on the NYSE under the symbol "HD". The annual dividend yield of the common shares of The Home Depot, Inc. as of June 16, 2023 was 2.66%.

### Historical Price Performance

The following chart sets forth the historical price performance of the common shares of The Home Depot, Inc. for the period from May 31, 2013 to May 31, 2023. Historical price performance does not take into account distributions or dividends paid on the Underlying Securities.



All dollar amounts in graph in US\$.

**Historical price performance of the common shares of The Home Depot, Inc. will not necessarily predict future price performance of the common shares of The Home Depot, Inc. or the Debt Securities.** The source of the data displayed in this chart is Bloomberg L.P. and its accuracy cannot be guaranteed.

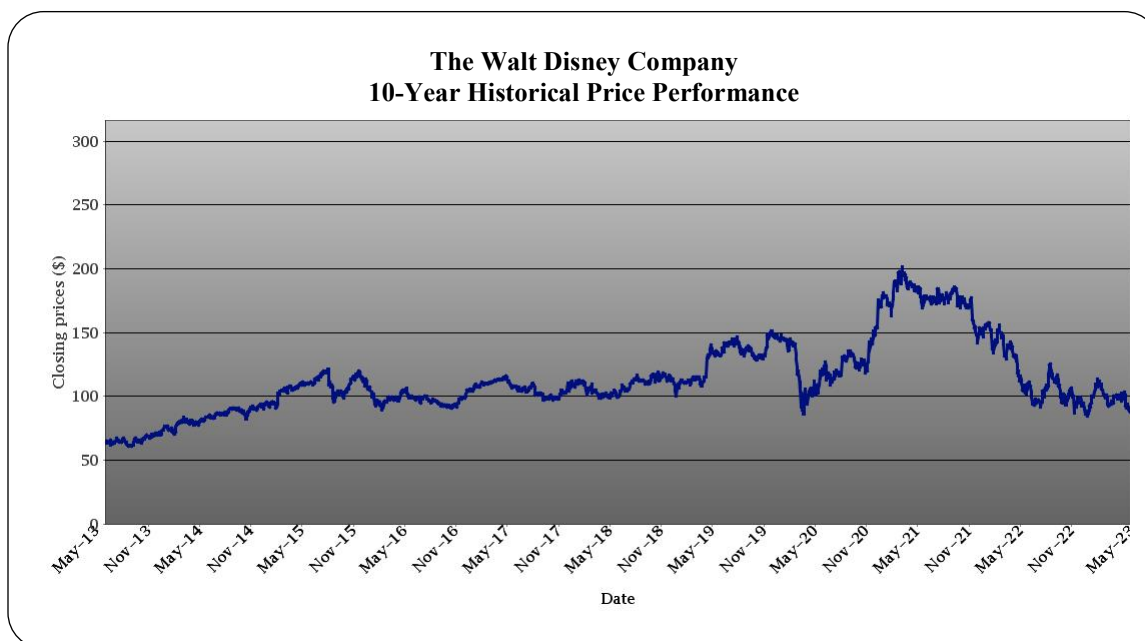
Historical annual percentage change of the common shares of The Home Depot, Inc.										
Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Percentage change (%)	33.13	27.48	25.99	1.38	41.36	-9.34	27.10	21.63	56.24	-23.89

## The Walt Disney Company

The Walt Disney Company operates as an entertainment and media enterprise company. The Walt Disney Company's business segments includes, media networks, parks and resorts, studio entertainment, consumer products, and interactive media. The Walt Disney Company serves customers worldwide. The Walt Disney Company's common shares are listed on the NYSE under the symbol "DIS". The annual dividend yield of the common shares of the Walt Disney Company as of June 16, 2023 was 0.00%.

### Historical Price Performance

The following chart sets forth the historical price performance of the common shares of Walt Disney Company for the period from May 31, 2013 to May 31, 2023. Historical price performance does not take into account distributions or dividends paid on the Underlying Securities.



All dollar amounts in graph in US\$.

**Historical price performance of the common shares of the Walt Disney Company will not necessarily predict future price performance of the common shares of the Walt Disney Company or the Debt 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 common shares of the Walt Disney Company										
Year	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Percentage change (%)	53.44	23.29	11.56	-0.82	3.16	1.99	31.90	25.27	-14.51	-43.91

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

## APPENDIX B

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

The examples set out below are included for illustration purposes only. The Portfolio Values used to illustrate the calculation of the Final Redemption Amount or Autocall Redemption Amount and the Interest Payment over the term of the Debt Securities are not estimates or forecasts of the Portfolio Values on which the Percentage Change, and in turn the Final Redemption Amount, Autocall Redemption Amount and Interest Payment, if any, will depend.

### Hypothetical Calculation of the Initial Portfolio Value

It is assumed that the aggregate Principal Amount of Debt Securities issued under this offering is US\$20,000,000.00 and the (hypothetical) closing prices of the Underlying Securities comprising the Portfolio on the Initial Valuation Date are as illustrated in the table below.

Entity Name	Symbol	Closing Price	Underlying Security Value in Portfolio (US\$)	Portfolio Weight	Number of Underlying Securities
Meta Platforms, Inc.	META	US\$281.00	2,000,000.00	10%	7,117.43772
Amazon.com, Inc.	AMZN	US\$125.49	2,000,000.00	10%	15,937.52490
The Bank of Nova Scotia	BNS	\$66.21	2,000,000.00	10%	30,206.91738
Ford Motor Company	F	US\$14.42	2,000,000.00	10%	138,696.25520
Enbridge Inc.	ENB	\$49.47	2,000,000.00	10%	40,428.54255
Apple Inc.	AAPL	US\$184.92	2,000,000.00	10%	10,815.48778
Canadian Imperial Bank of Commerce	CM	\$58.26	2,000,000.00	10%	34,328.87058
Alphabet Inc.	GOOGL	US\$123.53	2,000,000.00	10%	16,190.39909
The Home Depot, Inc.	HD	US\$300.38	2,000,000.00	10%	6,658.23290
The Walt Disney Company	DIS	US\$91.32	2,000,000.00	10%	21,901.00745

Based on those assumptions, the Initial Portfolio Value would be the sum of the Underlying Security values, which is US\$20,000,000.00.

### Hypothetical Calculation of the Final Portfolio Value

For illustration purposes, it is assumed that no Extraordinary Event has occurred and that the (hypothetical) closing prices of the Underlying Securities comprising the Portfolio on the Final Valuation Date are as illustrated in the table below. For the purposes of the following table, certain dollar values have been rounded to two decimal places.

Entity Name	Symbol	Closing Price	Number of Underlying Securities	Underlying Security Value in Portfolio (US\$)
Meta Platforms, Inc.	META	US\$344.23	7,117.43772	2,450,035.59
Amazon.com, Inc.	AMZN	US\$153.73	15,937.52490	2,450,075.70
The Bank of Nova Scotia	BNS	\$81.11	30,206.91738	2,450,083.07
Ford Motor Company	F	US\$17.66	138,696.25520	2,449,375.87
Enbridge Inc.	ENB	\$60.60	40,428.54255	2,449,969.68
Apple Inc.	AAPL	US\$226.53	10,815.48778	2,450,032.45
Canadian Imperial Bank of Commerce	CM	\$71.37	34,328.87058	2,450,051.49

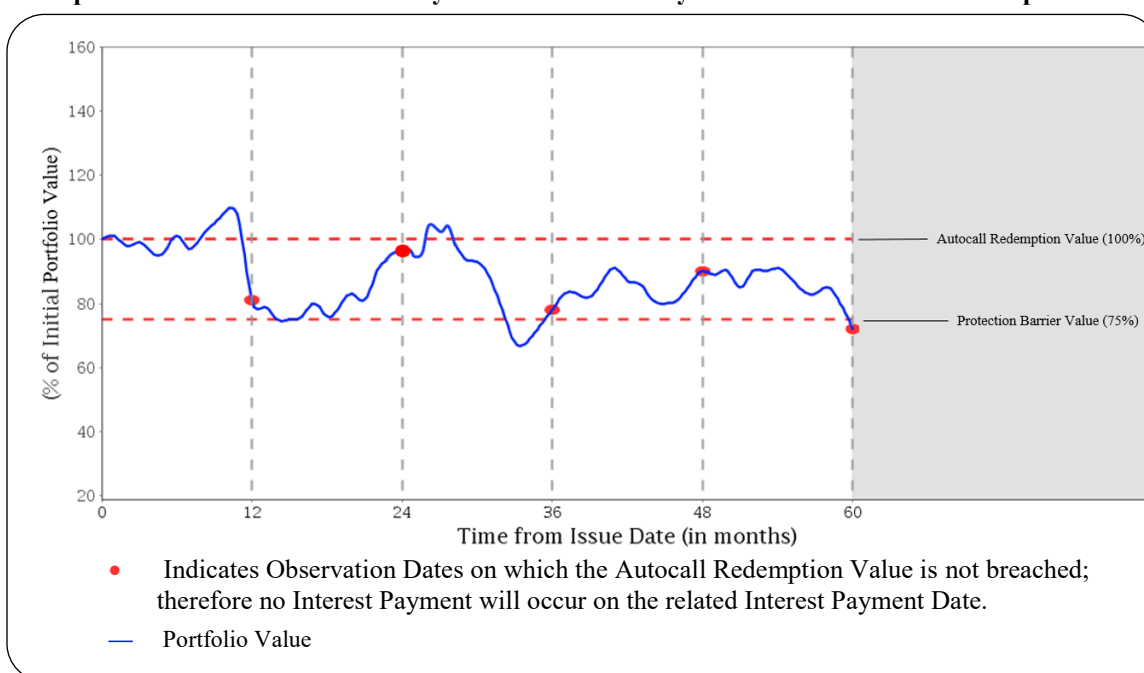


Alphabet Inc.	GOOGL	US\$151.32	16,190.39909	2,449,931.19
The Home Depot, Inc.	HD	US\$367.97	6,658.23290	2,450,029.96
The Walt Disney Company	DIS	US\$111.87	21,901.00745	2,450,065.70

Based on those assumptions, the Final Portfolio Value would be the sum of the Underlying Security values, which is US\$24,499,650.70.

All examples below assume that a holder of the Debt Securities has purchased Debt Securities with an aggregate principal amount of US\$100.00, that no Extraordinary Event has occurred, an Autocall Redemption Value of 100.00% of the Initial Portfolio Value and a Protection Barrier Value of 75.00% of the Initial Portfolio Value. For convenience, each vertical line in the charts below represents both a hypothetical Observation Date and the next succeeding Interest Payment Date. All dollar amounts are rounded to the nearest whole cent.

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



In this scenario, there is no Observation Date on which the Portfolio Value is greater than or equal to the Autocall Redemption Value and, accordingly, the Debt Securities would not be redeemed. On the Final Valuation Date, the Final Portfolio Value is below the Protection Barrier Value.

##### (i) Interest Payment

In this example, no Autocall Redemption Event would occur because the Portfolio Value at each Observation Date is below the Autocall Redemption Value. Therefore, an Interest Payment would not be payable on any Interest Payment Date.

##### (ii) Final Redemption Amount

In this example, the Initial Portfolio Value is US\$20,000,000.00 and the Final Portfolio Value is US\$14,600,000.00. Therefore, the Final Redemption Amount would be calculated as follows:

Initial Portfolio Value = US\$20,000,000.00

Final Portfolio Value = US\$14,600,000.00

Percentage Change =  $(\text{US\$14,600,000.00} - \text{US\$20,000,000.00}) / \text{US\$20,000,000.00} = -0.2700$  or -27.00%

Since the Final Portfolio Value is below the Protection Barrier Value, the Final Redemption Amount is calculated as follows:

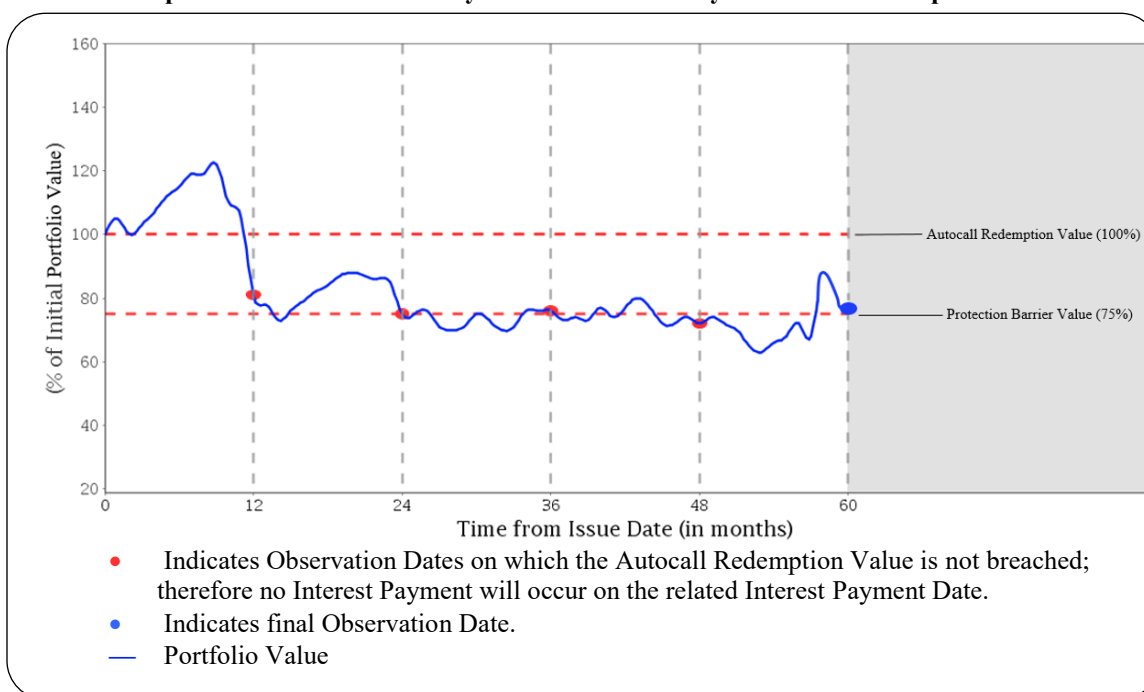
$$\text{Final Redemption Amount} = \text{US\$}100.00 + (\text{US\$}100.00 \times -27.00\%) = \text{US\$}73.00$$

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

- (a) Interest Payment: US\$0.00
- (b) Final Redemption Amount: US\$73.00
- (c) Total amount paid over the term of the Debt Securities: US\$73.00

The equivalent annually compounded rate of return in this example is -6.10%.

#### Example #2 — Scenario with Payment on the Maturity Date at the Principal Amount



In this scenario, there is no Observation Date on which the Portfolio Value is greater than or equal to the Autocall Redemption Value and, accordingly, the Debt Securities would not be redeemed. On the Final Valuation Date, the Final Portfolio Value is greater than or equal to the Protection Barrier Value but is below the Autocall Redemption Value.

#### (i) Interest Payment

In this example, no Autocall Redemption Event would occur because the Portfolio Value at each Observation Date is below the Autocall Redemption Value. Therefore, an Interest Payment would not be payable on any Interest Payment Date.

#### (ii) Final Redemption Amount

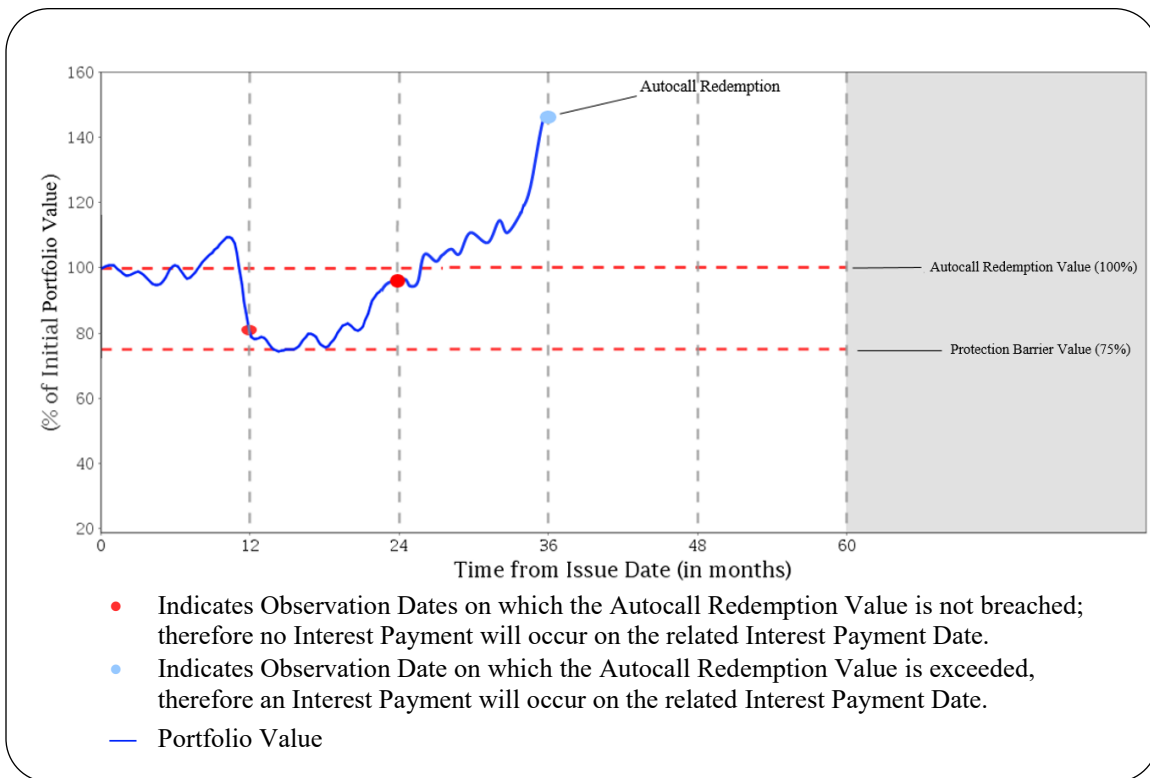
In this example, the Final Portfolio Value is greater than or equal to the Protection Barrier Value. Therefore, the Final Redemption Amount is US\$100.00.

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

- (a) Interest Payment: US\$0.00
- (b) Final Redemption Amount: US\$100.00
- (c) Total amount paid over the term of the Debt Securities: US\$100.00

The equivalent annually compounded rate of return in this example is 0.00%.

### Example #3 — Gain Scenario with Autocall Redemption Event



In this scenario, the Portfolio Value is greater than or equal to the Autocall Redemption Value on the Observation Date that falls 36 months into the term of the Debt Securities. This would constitute an Autocall Redemption Event and an Interest Payment would be payable on the third Interest Payment Date.

#### (i) Interest Payment

In this example, the Initial Portfolio Value is US\$20,000,000.00 and the Final Portfolio Value is US\$29,000,000.00; therefore, there is an Autocall Redemption Event on the third Observation Date. On the first and second Observation Dates, no Autocall Redemption Event would occur because the Portfolio Value at each such Observation Date is below the Autocall Redemption Value. Therefore, the Interest Payment payable on the Autocall Redemption Date would be equal to the sum of (i) US\$31.50 and (ii)  $5.00\% \times (\text{US\$100.00} \times \text{Percentage Change} - \text{US\$31.50})$ .

The Percentage Change is calculated as follows:

Initial Portfolio Value = US\$20,000,000.00

Final Portfolio Value = US\$29,000,000.00

Percentage Change =  $(\text{US\$29,000,000.00} - \text{US\$20,000,000.00}) / \text{US\$20,000,000.00} = 0.4500$  or 45.00%

Since the Percentage Change is greater than 31.50%, the Interest Payment is calculated as follows:

Interest Payment =  $\text{US\$31.50} + [5.00\% \times (\text{US\$100.00} \times 45.00\% - \text{US\$31.50})] = \text{US\$32.18}$

#### (ii) Autocall Redemption Amount

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

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

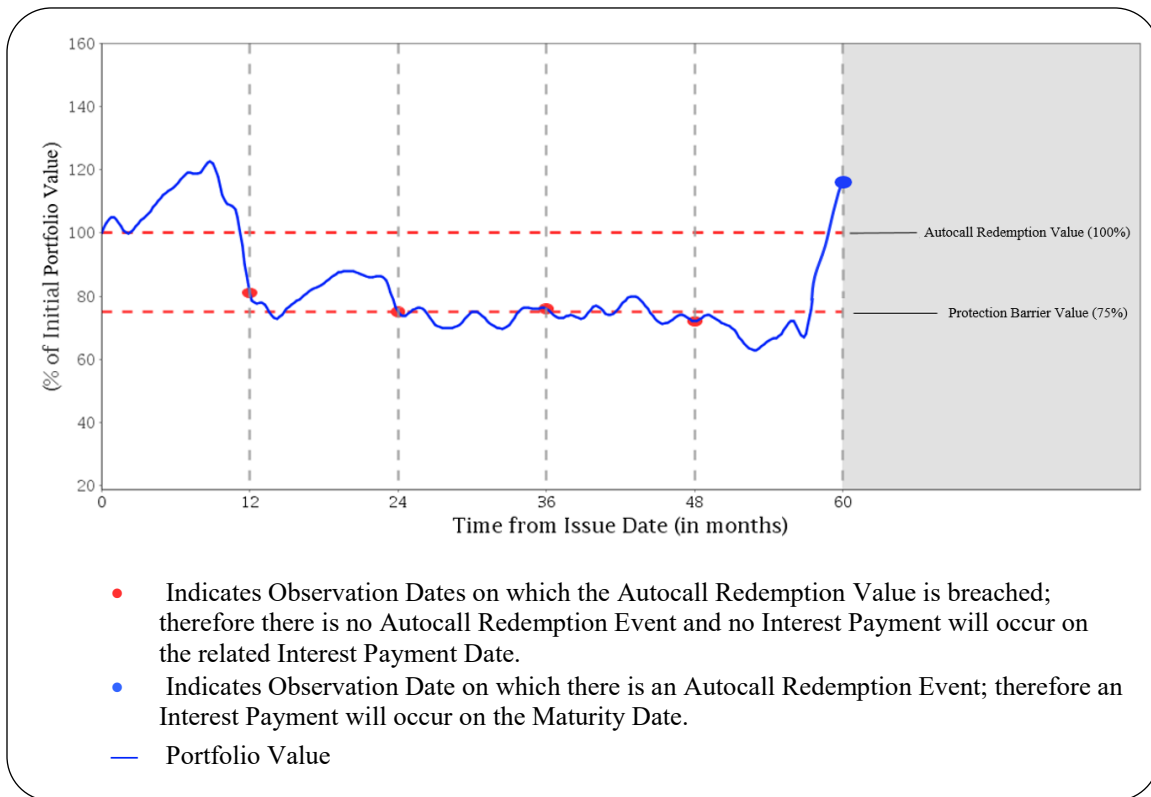
(a) Interest Payment: US\$32.18

(b) Autocall Redemption Amount: US\$100.00

(c) Total amount paid over the term of the Debt Securities: US\$132.18

The equivalent annually compounded rate of return in this example is 9.75%.

#### Example #4 — Gain Scenario with Autocall Redemption Event



In this scenario, the Portfolio Value is greater than or equal to the Autocall Redemption Value on the final Observation Date. This would constitute an Autocall Redemption Event and an Interest Payment would be payable on the Maturity Date (being the final Interest Payment Date).

#### (i) Interest Payment

In this example, the Initial Portfolio Value is US\$20,000,000.00 and the Final Portfolio Value is US\$24,000,000.00; therefore, there is an Autocall Redemption Event on the Final Valuation Date (being the final Observation Date). On the first, second, third and fourth Observation Dates, no Autocall Redemption Event would occur because the Portfolio Value at each such Observation Date is below the Autocall Redemption Value. Therefore, the Interest Payment payable on the Maturity Date (being the final Interest Payment Date) would be calculated as follows:

Initial Portfolio Value = US\$20,000,000.00

Final Portfolio Value = US\$24,000,000.00

Percentage Change =  $(\text{US\$24,000,000.00} - \text{US\$20,000,000.00}) / \text{US\$20,000,000.00} = 0.2000$  or 20.00%

Since the Percentage Change is less than 52.50%, the Interest Payment is US\$52.50.

(ii) Autocall Redemption Amount

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

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

(a) Interest Payment: US\$52.50

(b) Autocall Redemption Amount: US\$100.00

(c) Total amount paid over the term of the Debt Securities: US\$152.50

The equivalent annually compounded rate of return in this example is 8.81%.

## 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 Debt 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 Debt 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 Debt Securities and that the Debt 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 Debt Securities having regard to their particular circumstances.**

Except as described below under "Disposition of Debt Securities", all amounts relating to the acquisition, holding or disposition of Debt Securities must be expressed in Canadian dollars using the rate of exchange quoted by the Bank of Canada for the day the amount first arose, or such other rate of exchange as is acceptable to the CRA.

#### **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 Debt Securities as capital property (a "**Resident Holder**"). Certain Resident Holders who might not otherwise be considered to hold their Debt Securities as capital property may, in certain circumstances, have their Debt Securities, and all other "Canadian securities" (as defined in the Tax Act) owned by such Resident Holders in the taxation year and each subsequent taxation year, treated as capital property as a result of having made the irrevocable election permitted by subsection 39(4) of the Tax Act.

#### *Holding Debt Securities*

The amount of any Interest Payment 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.

In certain circumstances, provisions of the Tax Act require a holder of a "prescribed debt obligation" (as defined for the purposes of the Tax Act) to include in income for each taxation year the amount of any interest, bonus or premium receivable on the obligation over its term based on the maximum amount of interest, bonus or premium receivable on the obligation. While the Debt Securities will generally be considered to be prescribed debt obligations to a Resident Holder, based on counsel's understanding of the CRA's current administrative practice, there should be no deemed accrual of interest on a prescribed debt obligation until such time as the return thereon becomes determinable. Counsel has been advised that the Bank anticipates that throughout each taxation year ending before an Autocall Redemption Date including the Maturity Date, the return on the Debt Securities generally will not be determinable. Where this is the case, on the basis of such understanding of the CRA's administrative practice there should be no deemed accrual of interest on the Debt Securities for taxation years (being calendar years) of a Resident Holder ending prior to an Autocall Redemption Date including the Maturity Date (or, if applicable, the date of their earlier repayment in full), except as described below under "Disposition of Debt Securities" where a Debt Security is transferred before any such date.

#### *Disposition of Debt Securities*

Where a Resident Holder disposes of a Debt Security (other than to the Bank on an Autocall Redemption Date including the Maturity Date, or earlier redemption or repayment in full), the Tax Act requires the amount of interest, if any, accrued on the Debt Security that is unpaid at that time to be included in computing the income of the Resident Holder for the taxation year in which the disposition occurs (except to the extent such amount has otherwise been included in computing the income of the Resident Holder for that year or a preceding year), and excludes such amount from the proceeds of disposition. On an

assignment or other transfer of a Debt Security by a Resident Holder (other than to the Bank on an Autocall Redemption Date including the Maturity Date, or an earlier redemption or repayment in full), a formula amount will be deemed to have accrued on the Debt Security up to the time of the transfer, so that such amount will be required to be included in the income of the Resident Holder for the taxation year of the Resident Holder in which the transfer occurs. Such formula amount equals the excess, if any, of the price for which it is so transferred (converted, where applicable, into Canadian dollars using the exchange rate prevailing at the time of the transfer) over its U.S. dollar outstanding principal amount at such time converted into Canadian dollars using the exchange rate prevailing at such time.

The Resident Holder should realize a capital loss (or a capital gain) to the extent that the proceeds of disposition, net of amounts included in income as interest (including any formula amount as described above) and any reasonable costs of disposition, are less than (or exceed) the Resident Holder's adjusted cost base of the Debt Securities. Resident Holders who dispose of Debt Securities prior to an Autocall Redemption Date including the Maturity Date (or earlier redemption or repayment in full by the Bank) should consult their own tax advisors with respect to their particular circumstances.

#### *Payment at Maturity or Early Repayment*

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

#### *Treatment of Losses (or Capital Gains)*

One-half of any capital loss realized by a Resident Holder will constitute an allowable capital loss that is deductible against taxable capital gains of the Resident Holder, subject to and in accordance with the provisions of the Tax Act. One-half of any capital gain realized by a Resident Holder must be included in the income of the Resident Holder. Capital gains realized by an individual may give rise to a liability for alternative minimum tax.

#### **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 Debt Securities, is not a "specified shareholder" of the Bank or 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 Debt 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 Debt Securities (including any amount paid at maturity or early repayment in full in excess of the principal amount and interest deemed to be paid in certain cases involving the assignment or other transfer of a Debt Security to a resident or deemed resident of Canada, likely including any formula amount referred to above) 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 Debt Securities, interest paid or credited or deemed to be paid or credited on the Debt 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 Debt Security.

#### **Eligibility for Investment**

The Debt 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**"), first home savings accounts ("**FHSAs**"), 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 Debt Securities are "prohibited investments" (as that term is defined in the Tax Act) for an RRSP, RRIF, TFSA, RDSP, FHSA or RESP, the annuitant of the RRSP or RRIF, the holder of the TFSA, RDSP or FHSA, 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. Debt Securities will be prohibited investments for an RRSP, RRIF, TFSA, RDSP, FHSA 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. Investors should consult their own tax advisors in this regard.