

**Pricing Supplement to the Short Form Base Shelf Prospectus dated January 30, 2018,  
the Prospectus Supplement thereto dated January 30, 2018 and  
the Prospectus Supplement thereto dated January 30, 2018**

*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 January 30, 2018, the prospectus supplement dated January 30, 2018 and the prospectus supplement dated January 30, 2018, 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.*

**June 8, 2018**



**Royal Bank of Canada  
Senior Note Program  
Equity and Debt Linked Securities  
Maximum \$20,000,000 (200,000 Debt Securities)  
RBC North American Technical & Quantitative RoC Securities CAD Hedged, Series 4  
Due June 9, 2028  
Non-Principal Protected Securities**

Royal Bank of Canada (the “**Bank**”) is offering up to \$20,000,000 of RBC North American Technical & Quantitative RoC Securities CAD Hedged, Series 4 (the “**Debt Securities**”), designed to provide investors with “long” exposure to the Bank’s proprietary 6-factor quantitative models (the “**Canadian Model**” with respect to the model applicable to the Canadian Index (defined below), the “**U.S. Model**” with respect to the model applicable to the U.S. Index (defined below) and, collectively, the “**Models**”), with the ability to allocate to Fixed Income Investments (defined herein) based on whether the stocks in the S&P/TSX Composite Index (the “**Canadian Index**”) and S&P 1500® Composite Index (the “**U.S. Index**”) and together with the Canadian Index, the “**Indices**”) exhibit bearish trends to such an extent that the stocks of less than 20 issuers are eligible for notional inclusion in the applicable Equity Investment (defined herein) as determined by the applicable Model, while at the same time providing a partial hedge of the potential currency risk between the Canadian dollar currency, in which the Debt Securities and all payments under the Debt Securities to holders of the Debt Securities are denominated, and the United States dollar currency in which the notional investments in the U.S. Portfolio (defined herein) are denominated. The goal of this strategy is to be exposed to the performance of the stocks selected by the Models, including dividends and other distributions, when the trends are positive for the applicable equity markets and to reduce or eliminate this exposure when the trends for such equity markets become negative.

The return of the Debt Securities will reflect the return over the term to maturity of the Debt Securities of a notional Canadian portfolio (the “**Canadian Portfolio**”) and U.S. portfolio (the “**U.S. Portfolio**”) and together with the Canadian Portfolio, the “**Portfolios**”), each individually consisting of assets allocated dynamically over the term of the Debt Securities between the applicable Equity Investment and/or the applicable Fixed Income Investment, determined and reallocated on a monthly basis based on the applicable Strategy (defined herein). An Equity Investment for each Portfolio will be a notional portfolio composed of stocks (the “**Underlying Equity Securities**” and each, an “**Underlying Equity Security**”) of no more than 20 ranked issuers (the “**Underlying Equity Security Issuers**” and each, an “**Underlying Equity Security Issuer**”) resulting from the application of the applicable Model. A Fixed Income Investment for each Portfolio will be a notional investment, made following an Allocation Date (defined herein), in a notional three-year zero coupon bond (each, a “**Bond**”) with a yield to maturity equal to the three-year Canadian dollar zero coupon inter-bank swap rate for the Canadian Portfolio and the three-year United States dollar inter-bank swap rate for the U.S. Portfolio, in each case, on the date when the Fixed Income Investment is notionally made, except as described under “Fixed Income Investments”. The asset allocation of each Portfolio to an Equity Investment and/or Fixed Income Investment will be determined monthly.

As of June 7, 2018, the three-year Canadian dollar inter-bank zero coupon swap rate was approximately 2.000680% and the three-year United States dollar inter-bank zero coupon swap rate was approximately 2.482008%.

Holders of the Debt Securities will be subject to United States withholding tax on dividend equivalent payments under Section 871(m) of the United States Internal Revenue Code, except for certain retirement, pension or employee benefit entities or arrangements. Please see “Certain United States Federal Income Tax Considerations” in Appendix B for further details.

**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 initial estimated value of the Debt Securities as of the date of this pricing supplement is \$97.85 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. This initial estimated value of the Debt Securities was calculated by deducting the sum of the upfront portion of the Note Program Amount (defined herein) and the selling commissions payable to the Dealers (defined below) from the Principal Amount (defined herein). 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. **The initial estimated value of the Debt Securities does not take into account the ongoing fees and expenses applicable during the term of the Debt Securities, including the Ongoing Annual Amounts (defined herein), or any Canadian foreign tax credits or deductions which may be available to the Bank in respect of foreign withholding taxes which may apply to dividends and other distributions received by the Bank if the Bank were to hedge its obligations under the Debt Securities by acquiring the U.S. Underlying Equity Securities (defined herein).** We describe our determination of the initial estimated value in more detail below. See “Risk Factors” and “Preparation of Initial Estimated Value”.

The Models are designed to provide objective measures of the performance potential of the equity securities, including dividends and other distributions, of issuers selected by the Models. Except with respect to High Risk Country Stocks (defined herein) included in the U.S. Index, the Models do not rely on subjective judgment, but rather use the latest trailing Price to Earnings, trailing Reinvestment Rates, “Earnings Surprise”, 3-Month Estimate Revisions, 3-Month Price Change and 5-Year Beta (each defined in Appendix A) to rank the stocks of the issuers in each of the Indices in order to construct two notional portfolios, each individually consisting of the stocks of no more than the top 20 ranked issuers. On the last Business Day (defined in the program supplement) of each month, each Model ranks the stocks in the applicable Index based on the following six valuation parameters:

- |                              |                                     |
|------------------------------|-------------------------------------|
| • <b>Price to Earnings</b>   | • <b>3-Month Estimate Revisions</b> |
| • <b>Reinvestment Rate</b>   | • <b>3-Month Price Change</b>       |
| • <b>“Earnings Surprise”</b> | • <b>5-Year Beta</b>                |

At maturity, each holder of a Debt Security will receive an amount for such Debt Security equal to the Redemption Amount (defined herein). The Redemption Amount will be subject to a minimum payment of \$1.00 per Debt Security and will vary throughout the term with the Variable Return (defined herein), which may be positive or negative. The Variable Return reflects the deduction of the fees and expenses of the offering because it is calculated net of the Note Program Amount and the selling commissions. See “Summary of Fees and Expenses”. The Variable Return will also be affected by the CAD/USD Foreign Exchange Rate (defined herein) and may also be affected by a number of other factors beyond the control of the Bank. As a result, the Redemption Amount will not be determinable before maturity. See “Risk Factors”. If the Value of the Portfolios (defined herein) decreases or does not increase sufficiently, holders will receive less than the amount they invested in the Debt Securities and could lose some or substantially all of their investment in the Debt Securities.

Holders will also receive partial repayments of the Principal Amount calculated quarterly and, except as described under “Extraordinary Distributions”, payable no later than the fifth Business Day following the end of each calendar quarter during the term of the Debt Securities, other than the calendar quarter in which the Final Valuation Date (defined herein) falls, equal to the sum of (a) the amount of any Canadian Equity Distributions (defined herein) and (b) the amount of any U.S. Equity Distributions (defined herein) paid during the immediately preceding calendar quarter, to a maximum of \$99.00 per Debt Security over the term of the Debt Securities. Upon the cumulative total of such partial repayments of the Principal Amount reaching \$99.00 per Debt Security, Canadian Equity Distributions will be notionally reinvested in the Canadian Portfolio on the first Business Day of the next calendar quarter in accordance with the allocation of the Canadian Portfolio at the beginning of such calendar quarter and, except as described under “Extraordinary Distributions”, the amount of U.S. Equity Distributions will be payable as interest no later than the fifth Business Day following the end of each calendar quarter during the term of the Debt Securities other than the calendar quarter in which the Final Valuation Date falls, which will be paid on the Maturity Date (defined herein). Canadian Extraordinary Distributions (defined herein) and Reinvested Extraordinary Distributions (defined herein) will be notionally reinvested in the applicable Portfolio on a Business Day to be determined by the Calculation Agent (defined herein) in accordance with the allocation of such Portfolio on the date of reinvestment. With respect to U.S. Extraordinary Distributions (defined herein), the Calculation Agent will have discretion in determining the timing of repayment.

The Portfolios are notional only, meaning that the assets in the Portfolios 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 assets in the Portfolios 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, dividends and other distributions, etc.) taken in connection with the Portfolios are notional actions only.

The Debt Securities will provide a partial hedge of the potential currency risk between the Canadian dollar currency, in which the Debt Securities and all payments under the Debt Securities to holders of the Debt Securities are denominated, including payment of the

Redemption Amount at maturity, and the United States dollar currency in which the notional investments in the U.S. Portfolio are denominated. In order to accomplish this hedge, on the last Business Day of the calendar month immediately prior to the Initial Valuation Date (defined herein) and on the last Business Day of each calendar quarter thereafter, there will be a notional hedging of the U.S. Portfolio values at that time through the entering into of a Currency Forward (defined herein) that will lock in the Canadian dollar value of the Net Value of the U.S. Portfolio (defined herein) when it is calculated on the Issue Date and when it is recalculated on the last day of each calendar quarter thereafter during the term of the Debt Securities at the then prevailing CAD/USD Foreign Exchange Rate. However, the amount of any change in the Net Value of the U.S. Portfolio between the Issue Date and the last Business Day of each calendar quarter thereafter, including the amount of any notional dividends or other distributions, the amount of any change in the Net Value of the U.S. Portfolio between the last Business Day of each calendar year and the last Business Day of the following calendar quarter due to the annual rebalancing and the full Value of the U.S. Portfolio between the Final Currency Forward Date (defined herein) and the Final Valuation Date will be exposed to fluctuations in the exchange rate between the Canadian dollar and the United States dollar over each applicable period. The Value of the U.S. Portfolio will be calculated by the Calculation Agent in Canadian dollars converted using the Daily Exchange Rate (defined herein) for the day such calculation is made, provided that any calculations with respect to the Redemption Amount will be calculated based on the applicable CAD/USD Foreign Exchange Rate.

The Debt Securities are described in this pricing supplement delivered together with our short form base shelf prospectus dated January 30, 2018 (the “**base shelf prospectus**”), the prospectus supplement establishing our Senior Note Program dated January 30, 2018 (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 January 30, 2018 (the “**product supplement**”).

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

**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 Portfolios and investors have no rights with respect to the securities in the Portfolios. 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 Value of the Portfolios, 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: \$100 per Debt Security			
Minimum Subscription: \$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	\$100.00	\$2.15	\$97.85
Total <sup>(2)</sup>	\$20,000,000	\$430,000	\$19,570,000

(1) A commission of 2.00% 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 upfront note program amount of 0.15% of the Principal Amount of Debt Securities issued under this offering will be retained by the Bank. An agency fee will be paid out of the upfront portion of the Note Program Amount to Laurentian Bank Securities Inc. 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 of 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 Laurentian Bank Securities Inc. (collectively, the “**Dealers**”) as agents under a dealer agreement dated January 30, 2018, 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, 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.

### 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 fact sheet 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 8, 2018 (the “**Amended Filing**”) 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.

The version of the fact sheet 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 on June 7, 2018 (the “**Initial Filing**”) is not part of this pricing supplement or the base shelf prospectus to the extent that the contents of the Initial Filing have been modified or superseded by a statement contained in this pricing supplement. The Amended Filing provides the weighted total indicated dividend yield on the Underlying Equity Securities as of April 30, 2018. Pursuant to Subsection 7 of Part 9A.3 – *Marketing Materials after a Receipt for a Final Base Shelf Prospectus* of National Instrument 44-102 – *Shelf Distributions*, the Bank prepared and filed the Amended Filing which was blacklined to the Initial Filing to show the modified statements, and the Amended Filing and blackline can be viewed under the Bank’s profile on [www.sedar.com](http://www.sedar.com).

### 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 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 month periods ended or as at April 30, 2018 (the “**Q2 2018 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, 2017 (the “**2017 Management’s Discussion and Analysis**”) for Canadian, U.S., European and global economies, the regulatory environment in which we operate, the Strategic priorities and Outlook sections in the 2017 Management’s Discussion and Analysis as updated by the Overview and outlook section of the Q2 2018 Management’s Discussion and Analysis for each of our business segments, and the risk environment including our 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”, “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, strategic, reputation, legal and regulatory environment, competitive and systemic risks and other risks discussed in the risks sections of the 2017 Management’s Discussion and Analysis and the Risk management section of the Q2 2018 Management’s Discussion and Analysis incorporated by reference herein; including global uncertainty and volatility, elevated Canadian housing prices and household indebtedness, information technology and cyber risk, including the risk of cyber-attacks or other information security events at or impacting our service providers or other third parties with whom we interact, regulatory change, technological innovation and non-traditional competitors, global environmental policy and climate change, changes in consumer behaviour, the end of quantitative easing, 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 environmental and social risk.

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 Overview and outlook section and for each business segment under the Strategic priorities and Overview and outlook headings in our 2017 Management’s Discussion and Analysis, as updated by the Overview and outlook section of the Q2 2018 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 our 2017 Management’s Discussion and Analysis and the Risk management section of the Q2 2018 Management’s Discussion and Analysis incorporated by reference in this prospectus.

**Royal Bank of Canada**  
**Senior Note Program**  
**Equity and Debt Linked Securities**  
**Maximum \$20,000,000 (200,000 Debt Securities)**  
**RBC North American Technical & Quantitative RoC Securities CAD Hedged, Series 4**  
**Due June 9, 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 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. See “Plan of Distribution” in the program supplement.
<b>Issue:</b>	RBC North American Technical & Quantitative RoC Securities CAD Hedged, Series 4 due June 9, 2028 (the “ <b>Debt Securities</b> ”).
<b>Fundserv Code:</b>	RBC2784
<b>Objective of the Debt Securities:</b>	The Debt Securities have been designed to provide investors with “long” exposure to the Bank’s proprietary 6-factor quantitative models, with the ability to allocate to fixed income investments based on whether the stocks in the S&P/TSX Composite Index (the “ <b>Canadian Index</b> ”) and the S&P 1500 <sup>®</sup> Composite Index (the “ <b>U.S. Index</b> ”) and together with the Canadian Index, the “ <b>Indices</b> ”) exhibit bearish trends to such an extent that the stocks of less than 20 issuers are eligible for notional inclusion in the applicable Equity Investment (defined below) as determined by the applicable Model (defined below), while at the same time providing a partial hedge of the potential currency risk between the Canadian dollar currency, in which the Debt Securities and all payments under the Debt Securities to holders of the Debt Securities are denominated, and the United States dollar currency in which the notional investments in the U.S. Portfolio (defined below) are denominated. The stocks selected by the Models are chosen from (i) the Canadian Index with respect to the Canadian Model (defined below) and (ii) the U.S. Index with respect to the U.S. Model (defined below). The goal of this strategy is to be exposed to the performance of the stocks selected by the Models, including dividends and other distributions, when the trends are positive for the applicable equity markets and to reduce or eliminate this exposure when the trends for such equity markets become negative.
<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 \$5,000.
<b>Denomination:</b>	Debt Securities are issuable in denominations of \$100 (the “ <b>Principal Amount</b> ”) and in minimum increments of \$100.
<b>Issue Date:</b>	July 5, 2018 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 \$20,000,000.

<b>Initial Valuation Date:</b>	July 2, 2018 for the U.S. Portfolio and July 3, 2018 for the Canadian Portfolio (defined below).
<b>Final Valuation Date:</b>	June 7, 2028, being the second Exchange Day (defined in the product supplement) before the Maturity Date (defined below).
<b>Maturity Date:</b>	June 9, 2028 (approximately a 10-year term). 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>Return of Capital Securities:</b>	The Debt Securities are “RoC Securities”. See “Description of the Equity, Unit and Debt Linked Securities – Return of Capital Securities” in the product supplement.
<b>Portfolio:</b>	<p>The notional Canadian portfolio (the “<b>Canadian Portfolio</b>”) and the notional U.S. portfolio (the “<b>U.S. Portfolio</b>”) will each consist of assets allocated dynamically over the term of the Debt Securities to a Canadian Equity Investment (defined below) and/or a Canadian Fixed Income Investment (defined below) for the Canadian Portfolio, and to a U.S. Equity Investment (defined below) and/or a U.S. Fixed Income Investment (defined below) for the U.S. Portfolio, determined and reallocated on a monthly basis based on the applicable Strategy (defined below). The Canadian Portfolio and the U.S. Portfolio are collectively referred to as the “<b>Portfolios</b>”. Each Portfolio will be rebalanced back to the Portfolio Weighting (defined below) on an annual basis as described under “Rebalancing of Allocations” below.</p>

On the Issue Date, an amount equal to \$48.93 per Debt Security will be notionally invested in the Canadian Portfolio and an amount equal to \$48.92 per Debt Security will be notionally invested in the U.S. Portfolio, the sum of such amounts being equal to the Principal Amount per Debt Security less the \$2.00 selling commission and the \$0.15 upfront portion of the Note Program Amount (defined below). The initial notional investment in the U.S. Portfolio on the Issue Date will be made in United States dollars by converting \$48.92 per Debt Security into United States dollars on the Initial Valuation Date at the CAD/USD Foreign Exchange Rate (defined below) for the immediately preceding day for which such rate is posted. Notional investments in the U.S. Portfolio, whether a U.S. Equity Investment or a U.S. Fixed Income Investment, will be denominated in United States dollars.

As of April 30, 2018, the Canadian Portfolio was allocated 100% to a Canadian Equity Investment and the U.S. Portfolio was allocated 100% to a U.S. Equity Investment. The indicative yield of the Canadian Underlying Equity Securities (defined below) as of April 30, 2018 was 1.58% assuming an equal weighting of the Canadian Underlying Equity Securities in the Canadian Equity Investment. The indicative yield of the U.S. Underlying Equity Securities (defined below) as of April 30, 2018 was 1.06% (gross of any applicable withholding tax) assuming an equal weighting of the U.S. Underlying Equity Securities in the U.S. Equity Investment. Consequently, the weighted total indicated dividend yield on the Underlying Equity Securities as of April 30, 2018 was 1.32% (gross of any applicable withholding tax). Partial Principal Repayments (defined below) are only calculated to the extent of the portions of the Portfolios allocated to Equity Investments. See “Partial Principal Repayments”.

THE ALLOCATIONS OF THE PORTFOLIOS AS BETWEEN EQUITY INVESTMENTS AND FIXED INCOME INVESTMENTS MAY CHANGE

BETWEEN APRIL 30, 2018 AND THE ISSUE DATE BASED ON THE APPLICATION OF THE STRATEGIES ON THE ALLOCATION DATES (DEFINED BELOW) THAT OCCUR FOLLOWING APRIL 30, 2018 AND PRIOR TO THE ISSUE DATE. SEE “THE STRATEGY”.

The composition of the Portfolios and the weightings on the Issue Date will be published at [www.rbcnotes.com](http://www.rbcnotes.com).

The Calculation Agent (defined below) will adjust the Portfolios if it determines that a Substitution Event (defined in the product supplement) has occurred in respect of an Underlying Equity Security or Underlying Equity Securities in the Portfolios. See “Extraordinary Events and Substitution Events”.

**The Strategy:**

On the last Exchange Day of the month immediately preceding the Issue Date, and on the last Exchange Day of each month thereafter that the Debt Securities remain outstanding, other than the month immediately preceding the month in which the Final Valuation Date and/or Maturity Date falls, (each, an “**Allocation Date**”) the “**Canadian Strategy**” and the “**U.S. Strategy**” (collectively, the “**Strategies**”) will compare the Reassessed Number of Issuers (defined below) to the Current Number of Issuers (defined below), if any, to determine the asset allocation for the applicable Portfolio for the next month.

“**Reassessed Number of Issuers**” on any Allocation Date means the lesser of (a)(i) the number of Underlying Equity Security Issuers that are eligible to notionally remain in the applicable Equity Investment for the following month, plus (ii) the number of issuers that are eligible to be added to the applicable Equity Investment for the following month (each number as determined by the applicable Model on the last Business Day (defined in the program supplement) of the month in which such Allocation Date falls) and (b) 20 issuers.

For the purposes of item (i) in the paragraph above, an Underlying Equity Security Issuer is eligible to notionally remain in an Equity Investment on an Allocation Date if (a) it has not fallen below the Applicable Sell Ranking Threshold (defined below), (b) its stock does not have a 3-Month Price Change of -5% or less (i.e., equal to or worse than -5%), (c) its stock is not a High Risk Country Stock in the U.S. Index or (d) it is not a real estate investment trust that is required to be removed. For the purposes of item (ii) in the paragraph above, an issuer is eligible to be added to an Equity Investment if the applicable Model so determines. See “The Models”.

“**Current Number of Issuers**” on any Allocation Date means the number of Underlying Equity Security Issuers notionally included in the applicable Equity Investment on such Allocation Date.

If the Reassessed Number of Issuers on an Allocation Date is less than the Current Number of Issuers on such Allocation Date (such that the corresponding Equity Investment for the following month will consist of at least one less Underlying Equity Security Issuer than the current month), the ineligible stocks will be notionally sold and the proceeds will be used to notionally purchase the Underlying Equity Securities to be notionally added to the applicable Equity Investment, if any, as described under “Equity Investments”, and the remaining portion will be used to notionally purchase Bonds (defined below) for the applicable Fixed Income Investment, as described under “Fixed Income Investments”.

If the Reassessed Number of Issuers on an Allocation Date is greater than the Current Number of Issuers on such Allocation Date (such that the corresponding Equity Investment for the following month will consist of at least one more Underlying Equity Security Issuer than the current month), the Bonds (or the applicable portion thereof) notionally included in the applicable Fixed Income Investment on such Allocation Date will be notionally sold as described under



“Fixed Income Investments” and the proceeds will be used to notionally purchase the Underlying Equity Securities to be notionally added to the applicable Equity Investment, as described under “Equity Investments”.

If the Reassessed Number of Issuers on an Allocation Date equals the Current Number of Issuers on such Allocation Date, the allocation of the applicable Portfolio between an Equity Investment and a Fixed Income Investment will remain unchanged for the following month.

For greater certainty, except as described under “Removal of Underlying Equity Securities from an Equity Investment”, at no time will the stock of more than 20 issuers be notionally included in an Equity Investment.

The allocation of each Portfolio as between Equity Investments and/or Fixed Income Investments will be published at [www.rbcnotes.com](http://www.rbcnotes.com).

### **The Models:**

The “**Canadian Model**” and the “**U.S. Model**” (collectively, the “**Models**”) are designed to provide objective measures of the performance potential of the equity securities, including dividends and other distributions, of issuers selected by the Models. Except with respect to High Risk Country Stocks (defined below) included in the U.S. Index, the Models do not rely on subjective judgment, but rather use the latest trailing Price to Earnings, trailing Reinvestment Rates, “Earnings Surprise”, 3-Month Estimate Revisions, 3-Month Price Change and 5-Year Beta (each defined in Appendix A) to rank the stocks in each of the Indices in order to construct the Canadian Equity Investment and the U.S. Equity Investment, each individually consisting of the stocks of no more than the top 20 ranked issuers. On the last Business Day of each month, each Model ranks the stocks in the applicable Index based on the following six valuation parameters:

- Price to Earnings
- Reinvestment Rate
- “Earnings Surprise”
- 3-Month Estimate Revisions
- 3-Month Price Change
- 5-Year Beta

See “Appendix A – Summary Information Regarding the Models” for a description of the six valuation parameters.

The Canadian Model ranks the stock of each issuer in the Canadian Index and the U.S. Model ranks the stock of each issuer in the U.S. Index to construct two notional portfolios each individually consisting of the stocks of no more than the top 20 ranked issuers for each Portfolio, as calculated on the last Business Day of each month.

For greater certainty, the Canadian Model will only rank stocks of issuers listed on the Canadian Index and the U.S. Model will only rank stocks of issuers listed on the U.S. Index.

For each of the six valuation parameters, the Calculation Agent will calculate each stock’s relative ranking on the last Business Day of each calendar month based on information made publicly available by that stock’s issuer. Assuming there are 242 issuers in the Canadian Index and 1516 issuers in the U.S. Index, the stock in each Index which most strongly exhibits a given valuation parameter will be assigned a score of “1”, while the stock in the Canadian Index that least strongly exhibits that same valuation parameter will be assigned a score of “242” by the Canadian Model and the stock in the U.S. Index that least strongly exhibits that same valuation parameter will be assigned a score of “1516” by the U.S. Model. Each stock will

receive six scores in total, one in respect of each of the valuation parameters. The sum of those six scores will be used to determine that stock's "composite score". This means that the Models do not favour any one valuation parameter over another. The Calculation Agent will then rank the stocks based on their composite scores to create an aggregate ranking, wherein, assuming there are 242 issuers in the Canadian Index and 1516 issuers in the U.S. Index, the best scoring stock in each Index will be ranked 1 and the worst scoring stock in the Canadian Index will be ranked 242 by the Canadian Model and the worst scoring stock in the U.S. Index will be ranked 1516 by the U.S. Model.

Once ranked by the Models, the stocks are vetted to remove those stocks that do not meet the Eligibility Criteria. The "**Eligibility Criteria**" are, collectively: (a) a stock that has a 3-Month Price Change of more than 5%, (b) a stock that is ranked in the top 20 by the applicable Model, (c) with respect to stocks in the U.S. Index, (i) a stock that falls within the parameters of the Share Volume Purchase Limits (defined below) and (ii) a stock that is not a High Risk Country Stock. The stock of an issuer will not be added to an Equity Investment unless it satisfies the Eligibility Criteria as determined by the applicable Model.

Underlying Equity Securities of an Underlying Equity Security Issuer will remain in an Equity Investment until they (a) fall below the top 100 rankings for the Canadian Model and the top 200 rankings for the U.S. Model (the "**Applicable Sell Ranking Threshold**") or (b) have a 3-Month Price Change of -5% or less (i.e., equal to or worse than -5%), as determined by the applicable Model, in which case such stocks will be removed from such Equity Investment over the first five Exchange Days of the following month, as described under "Removal of Underlying Equity Securities from an Equity Investment".

For the purposes of the Eligibility Criteria, "**Share Volume Purchase Limits**" means (a) the average daily trading volume of the stock is less than or equal to 20% of that stock's 3-month average daily trade volume on the date the U.S. Model is run and (b) the number of shares of the stock being purchased is less than or equal to 20% of the stock's average daily trading volume on the date the U.S. Model is run (based on the stock's most recent 3-month average daily trading volume).

"**High Risk Country Stock**" means, at any time, a stock of an issuer in the U.S. Index that the Bank, in its sole discretion, determines for the purposes of any hedging arrangements would be subject to levels of risk that exceed the Bank's then current risk thresholds, by reason of having its head office, a substantial amount of assets or operations or its primary listing exchange in a High Risk Country (defined below).

"**High Risk Country**" means, at any time, any country (other than the United States and Canada) that the Bank, in its sole discretion, determines for the purposes of any hedging arrangements would present levels of political, volatility and other risk that exceed the Bank's then current risk thresholds. At any time and from time to time throughout the term of the Debt Securities, the Bank may designate a country (other than the United States and Canada) as a High Risk Country or remove such designation.

The inclusion of any stock in the U.S. Portfolio is subject to the restrictions that notional holdings of the stocks of real estate investment trusts may be limited so that (a) after a notice by the Bank to the Calculation Agent which so specifies, no more than 5% of the Value of the U.S. Portfolio (defined below) shall consist of stocks of real estate investment trusts and (b) no stock of a real estate investment trust shall be included in the U.S. Portfolio after any notice by the Bank to the Calculation Agent that, if it were to hedge its obligations under the Debt Securities, such inclusion could result in the Bank becoming subject to United States withholding tax on certain dividends received by it on, or gain realized with respect to, stock of such real estate investment trust (including an interest in such stock held through a

derivative) as a result of such hedging.

The Bank has provided the notice to the Calculation Agent referred to in (a) of the paragraph above, but to date has not provided any notice referred to in (b) of the paragraph above.

The Models assume that the best indicators of the growth potential of an issuer's equity securities are: low Price to Earnings ratio, high Reinvestment Rate, high return on equity, high "Earnings Surprise", high and positive 3-Month Estimate Revisions, high 3-Month Price Change and low 5-Year Beta.

In certain special circumstances, it may be necessary for the Calculation Agent to make adjustments to the Portfolios. See "Extraordinary Events and Substitution Events".

#### **Equity Investments:**

On any Allocation Date on which a Portfolio is to consist in whole or in part of an Equity Investment, the Equity Investment for such Portfolio will be a notional portfolio composed of common shares (the "**Canadian Underlying Equity Securities**" for stocks included in the "**Canadian Equity Investment**" and the "**U.S. Underlying Equity Securities**" for stocks included in the "**U.S. Equity Investment**" and, collectively, the "**Underlying Equity Securities**") of no more than 20 ranked issuers (each, a "**Canadian Underlying Equity Security Issuer**" for issuers listed on the Canadian Index and a "**U.S. Underlying Equity Security Issuer**" for issuers listed on the U.S. Index and, collectively, the "**Underlying Equity Security Issuers**") resulting from the application of the applicable Model. The Canadian Equity Investment and the U.S. Equity Investment are collectively referred to as the "**Equity Investments**".

The initial Equity Investment for each of the Canadian Portfolio and the U.S. Portfolio, if any, will each be equally weighted among the stocks of no more than the top 20 ranked issuers that meet the Eligibility Criteria selected using the most recent monthly rankings generated by the Models since their December 31, 2015 inceptions, adjusted as described above.

At the December 31, 2015 inception of the Models, the Models ranked the top 20 issuers in each Index, as described under "The Models". Of those top 20 ranked issuers in each Index, the stocks of 13 issuers were eligible for inclusion in the Canadian Equity Investment and the stocks of 16 issuers were eligible for inclusion in the U.S. Equity Investment.

Canadian Underlying Equity Securities will be notionally purchased at a price equal to the average of their Closing Prices (defined below) for the five Exchange Days immediately following the applicable Allocation Date. U.S. Underlying Equity Securities will be notionally purchased at a price equal to the arithmetic mean of the Volume Weighted Average Price (defined below) for the five Exchange Days immediately following the applicable Allocation Date. Where the acquisition relates to the initial acquisition of Canadian Underlying Equity Securities that will be in the Canadian Portfolio on the Issue Date, if any, the notional purchases will be made at the average of the Closing Prices for the five Exchange Days commencing on and immediately following the Initial Valuation Date. Where the acquisition relates to the initial acquisition of U.S. Underlying Equity Securities that will be in the U.S. Portfolio on the Issue Date, if any, the notional purchases will be made at the arithmetic mean of the Volume Weighted Average Price for the five Exchange Days commencing on and immediately following the Initial Valuation Date. The Canadian Underlying Equity Securities and the U.S. Underlying Equity Securities will initially be equally weighted within the Canadian Equity Investment and U.S. Equity Investment, respectively, on the notional purchase date of such securities. Thereafter, Underlying Equity Securities notionally included in the Portfolios will be rebalanced back to equal weightings within their respective Equity Investments on a quarterly basis as described under "Rebalancing of an Equity Investment"

below.

Where an Equity Investment is disposed of, in whole or in part, the Underlying Equity Securities will be notionally sold at a price equal to the average of the Closing Prices for the five Exchange Days immediately following the applicable Allocation Date with respect to Canadian Underlying Equity Securities and the arithmetic mean of the Volume Weighted Average Price for the five Exchange Days immediately following the applicable Allocation Date with respect to U.S. Underlying Equity Securities. Where the notional disposition relates to the payment of the Redemption Amount (defined below) on the Maturity Date, the notional sales will be made at the average of the Closing Prices for the five Exchange Days immediately prior to and ending on the Final Valuation Date with respect to the Canadian Underlying Equity Securities and at the arithmetic mean of the Volume Weighted Average Price for the five Exchange Days immediately prior to and ending on the Final Valuation Date with respect to the U.S. Underlying Equity Securities.

Following any Allocation Date on which a Portfolio is to be reallocated in whole or in part from a Fixed Income Investment to an Equity Investment, the Fixed Income Investment (or the applicable portion thereof) will be notionally sold as described under “Fixed Income Investments”. Following such notional sale of the Fixed Income Investment (or the applicable portion thereof), the notional proceeds will be used to notionally purchase the Underlying Equity Securities to be notionally added to the applicable Equity Investment, as determined by the applicable Model and as described above.

The Debt Securities do not represent an interest in the Underlying Equity Securities, and holders of the Debt Securities will have no right or entitlement to the Underlying Equity Securities, including, without limitation, redemption rights (if any), voting rights or rights to receive dividends or other distributions paid on such Underlying Equity Securities. There will be no requirement for the Bank to hold any interest in the Underlying Equity Securities.

The Portfolios are notional only, meaning that the assets in the Portfolios will be used solely as a reference to calculate the amount payable on the Debt Securities. Holders of Debt Securities 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, dividends and other distributions, etc.) taken in connection with the Portfolios are notional actions only.

**“Volume Weighted Average Price”** means, in respect of a U.S. Underlying Equity Security on any Exchange Day, the volume weighted average price from 09:30 to 16:00 (local time), inclusive, in New York, excluding the Market-On-Close session and block trades in excess of 10,000 shares, as determined by the Calculation Agent using the “VAP” Bloomberg function, with the “Volume Range” stated as “0 to 10,000”.

**“Closing Price”** means, in respect of a Canadian Underlying Equity Security on any Exchange Day, the official closing price for that Canadian Underlying Equity Security as announced by the Toronto Stock Exchange (the “TSX”) on such Exchange Day, provided that, if on or after the Issue Date the TSX changes the time of day at which such official closing price is determined or fails to announce such official closing price, the Calculation Agent may thereafter deem the Closing Price to be the price of that Canadian Underlying Equity Security as of the time of day used by the TSX to determine the official closing price prior to such change or failure to announce. On any day other than an Exchange Day, the Closing Price shall be the official closing price for that Canadian Underlying Equity Security as announced by the TSX on the immediately preceding Exchange Day.

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 Equity Securities and/or the Underlying Equity Security Issuers. Additional information relating to any of the Underlying Equity Security Issuers whose Underlying Equity Securities are notionally included in the Portfolios can be obtained from the public disclosure filed on <http://www.sedar.com> (with respect to Canadian Underlying Equity Security Issuers), <https://www.sec.gov/edgar.shtml> (with respect to U.S. Underlying Equity Security Issuers) or other publicly available sources. The Bank and the Dealers have not verified the accuracy or completeness of any information pertaining to the Underlying Equity Security Issuers or determined if there has been any omission by any Underlying Equity 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 Equity Security Issuer which may affect the significance or accuracy of such information. Neither the Bank (except with respect to any documents of the Bank that are incorporated or deemed to be incorporated by reference into this pricing supplement) nor any Dealer makes any representation that such publicly available documents or any other publicly available information regarding any Underlying Equity Securities or Underlying Equity Security Issuer are accurate or complete. Prospective investors should independently investigate the Underlying Equity Security Issuers and decide whether an investment in the Debt Securities is appropriate. None of the Underlying Equity 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 Equity Security Issuers (other than the Bank if it is at any time an Underlying Equity Security Issuer). 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 Equity 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 Equity 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 our Senior Note Program are not privy to any information regarding either primary or secondary market purchases of the Underlying Equity Securities made by the Bank in connection with any primary distribution made by the Underlying Equity Security Issuers.

**Removal of Underlying Equity Securities from an Equity Investment:**

Over the first five Exchange Days of the month, other than the month in which the Final Valuation Date and/or Maturity Date occurs, the Underlying Equity Securities of an Underlying Equity Security Issuer will be removed from an Equity Investment if, on the last Business Day of the preceding month, the applicable Model determines that such Underlying Equity Security (a) has fallen below the Applicable Sell Ranking Threshold or (b) has a 3-Month Price Change of -5% or less (i.e., equal to or worse than -5%). Any Underlying Equity Securities so removed will be notionally sold and the proceeds from such notional disposition will be used to notionally purchase the stock of the next highest-ranked issuer (resulting from the application of the applicable Model on the last Business Day of the preceding month) that satisfies the Eligibility Criteria and that is not already notionally included in the applicable Equity Investment, as described under “Equity Investments”. If no such replacement stock is eligible for notional inclusion in the applicable Equity Investment, the notional proceeds will be used to notionally purchase Bonds, as described under “Fixed Income Investments”.

Any Underlying Equity Securities so removed will be notionally sold at a price equal to the average of the Closing Prices for the first five Exchange Days of the month with respect to Canadian Underlying Equity Securities and the arithmetic mean of the Volume Weighted Average Price for the first five Exchange Days of

the month with respect to U.S. Underlying Equity Securities.

U.S. Underlying Equity Securities will be notionally removed from a U.S. Equity Investment over the five Exchange Days commencing on and immediately following an Exchange Day to be determined by the Bank, in its sole discretion, (the “**Removal Date**”) as soon as is reasonably practicable following the date on which such U.S. Underlying Equity Securities are designated by the Bank as High Risk Country Stocks or in any situation where it is necessary to remove the stock of one or more real estate investment trusts. Any U.S. Underlying Equity Securities so removed will be notionally sold and the proceeds from such notional disposition will be used to notionally purchase the stock of the next highest-ranked issuer (resulting from the application of the U.S. Model on the Removal Date) that satisfies the Eligibility Criteria and that is not already notionally included in the U.S. Equity Investment at such time. The notional purchase and sale transactions will be effected at a price equal to the arithmetic mean of the Volume Weighted Average Price over such period. If no such replacement stock is eligible for notional inclusion in the U.S. Equity Investment, the proceeds will be used to notionally purchase U.S. Bonds (defined below), as described under “Fixed Income Investments”.

As a result of Underlying Equity Securities being notionally purchased and sold over the five Exchange Days immediately following the applicable Allocation Date or Removal Date, as applicable, each Portfolio could notionally include the stock of more than 20 issuers during such period.

**Rebalancing of an Equity Investment:**

The Equity Investments will be rebalanced back to an equal weighting within their respective Portfolios at the beginning of each calendar quarter, other than the calendar quarter in which the Final Valuation Date and/or Maturity Date occurs. Any Underlying Equity Securities removed as a result of the respective rebalancings will be notionally sold and the proceeds from such notional disposition will be used to notionally purchase the Underlying Equity Securities to be added to the applicable Equity Investment. Such notional acquisitions or dispositions will occur over the first five Exchange Days of such calendar quarter at the average of the Closing Prices of the Canadian Underlying Equity Securities being notionally purchased and sold over such period, or at the arithmetic mean of the Volume Weighted Average Price of the U.S. Underlying Equity Securities being notionally purchased and sold over such period, as applicable.

**Rebalancing of Allocations:**

At the beginning of each calendar year (unless the Final Valuation Date and/or Maturity Date fall in the month of January), the Canadian Portfolio and the U.S. Portfolio will be rebalanced back to an equal weighting, being approximately 50% of the Value of the Portfolios (defined below) for the Canadian Portfolio and approximately 50% of the Value of the Portfolios for the U.S. Portfolio (the “**Portfolio Weighting**”). Any Underlying Equity Securities or Bonds to be removed from a Portfolio as a result of such annual rebalancing will be notionally sold and the proceeds from such notional dispositions will be used to notionally purchase the Underlying Equity Securities or Bonds to be added to the other Portfolio. The notional dispositions of Bonds will occur on the first Exchange Day of each calendar year at the applicable prevailing bid or offer prices of such Bonds being notionally sold on such day. The notional acquisitions or dispositions of Underlying Equity Securities will occur over the first five Exchange Days of each calendar year at a price equal to the average of the Closing Prices for the first five Exchange Days of the calendar year with respect to Canadian Underlying Equity Securities and the arithmetic mean of the Volume Weighted Average Price for the first five Exchange Days of the calendar year with respect to U.S. Underlying Equity Securities. The proceeds from such notional Underlying Equity Security dispositions will be used to notionally purchase Canadian bonds or U.S. bonds, as applicable, at prices equal to the prevailing offer prices for bonds with yields to maturity equal to the Canadian dollar or United States dollar (as applicable) inter-bank bid zero coupon swap rate for a term equal to the term to maturity of the Canadian Bonds (defined below) or U.S. Bonds, as applicable, included in the applicable Fixed Income Investment at

such time. If no Bonds are included in the applicable Fixed Income Investment at such time, the proceeds will be used to notionally purchase Canadian Bonds and/or U.S. Bonds as described under “Fixed Income Investments”. Any bonds notionally purchased in the manner described in this paragraph will be treated for all purposes as if they were “Canadian Bonds”, or “U.S. Bonds”, as applicable, as defined below.

If the annual Portfolio allocation rebalancing requires the notional sale of U.S. Underlying Equity Securities and/or U.S. Bonds, the proceeds will be converted from United States dollars into Canadian dollars at the CAD/USD Foreign Exchange Rate on the immediately preceding day for which such rate is posted and then notionally invested in the Canadian Portfolio, as described above.

If the annual Portfolio allocation rebalancing requires the notional sale of Canadian Underlying Equity Securities and/or Canadian Bonds, the proceeds will be converted to United States dollars from Canadian dollars at the CAD/USD Foreign Exchange Rate on the immediately preceding day for which such rate is posted and then notionally invested in the U.S. Portfolio, as described above.

#### **Fixed Income Investments:**

A “**Canadian Fixed Income Investment**” and “**U.S. Fixed Income Investment**” (collectively, the “**Fixed Income Investments**”) will each be composed of a notional investment made following an Allocation Date in a notional three-year zero coupon bond with a yield to maturity equal to the three-year Canadian dollar zero coupon inter-bank swap rate for a Canadian Fixed Income Investment (the “**Canadian Bond**”) and with a yield to maturity equal to the three-year United States dollar zero coupon inter-bank swap rate for a U.S. Fixed Income Investment (the “**U.S. Bond**” and together with the Canadian Bond, the “**Bonds**”), respectively, as calculated by the Calculation Agent on the date when such Fixed Income Investment is notionally purchased. Canadian Bond and U.S. Bond rates will be determined by using industry-standard bootstrapping methodology for determining zero coupon rates, based on Canadian dollar or United States dollar inter-bank swap rates, respectively, quoted by Bloomberg under its Interest Rate Swap Rates service on the date when the Canadian Fixed Income Investment or U.S. Fixed Income Investment is notionally made.

Such Bonds will be notionally purchased at a price equal to the prevailing offer price for bonds with a yield to maturity equal to the applicably denominated inter-bank bid zero coupon swap rate for a three-year term and notionally sold at a price equal to the prevailing bid price for such bonds at the time of notional disposition, in each case as determined by the Calculation Agent, acting in good faith. Upon the notional maturity of a Bond held in either Portfolio, the notional amount received in respect of such Bond shall be used to immediately notionally purchase a Bond with a yield to maturity equal to the three-year applicably denominated inter-bank zero coupon swap rate, calculated in the manner referred to in the paragraph immediately above, on the date when such Bond is notionally purchased. The prices at which Bonds are notionally purchased and sold will be published at [www.rbcnotes.com](http://www.rbcnotes.com).

If the Calculation Agent determines that bonds are to be notionally purchased from the notional proceeds of Canadian Extraordinary Distributions (defined below) or Reinvested Extraordinary Distributions (defined below) at a time when Bonds are notionally included in the applicable Portfolio, such bonds will be notionally purchased at a price equal to the prevailing offer price for bonds with a yield to maturity equal to the Canadian dollar or United States dollar (as applicable) inter-bank bid zero coupon swap rate for a term equal to the term to maturity of the applicable Bonds notionally included in the applicable Portfolio at such time.

Following any Allocation Date on which a Portfolio (or a portion thereof) is to be reallocated from an Equity Investment to a Fixed Income Investment as a result of the applicable Strategy, the stocks that are to be removed from the Equity Investment will be notionally sold as described under “Equity Investments” and the proceeds that have not been used to purchase Underlying Equity Securities, if

applicable, will be used to notionally purchase Canadian bonds and/or U.S. bonds, as applicable, at prices equal to the prevailing offer prices for bonds with yields to maturity equal to the Canadian dollar or United States dollar (as applicable) inter-bank bid zero coupon swap rate for a term equal to the term to maturity of the Canadian Bonds or U.S. Bonds, as applicable, included in the applicable Portfolio at such time. If no Bonds are included in the applicable Fixed Income Investment at such time, the proceeds will be used to notionally purchase Canadian Bonds and/or U.S. Bonds as described under “Fixed Income Investments”. Any bonds notionally purchased in the manner described in this paragraph and the immediately preceding paragraph will be treated for all purposes as if they were “Canadian Bonds”, or “U.S. Bonds”, as applicable, as defined above.

On the first Exchange Day following any Allocation Date in which a Portfolio (or a portion thereof) is to be reallocated from a Fixed Income Investment to an Equity Investment, the Fixed Income Investment will be notionally sold and the proceeds of such notional sale will be used to notionally purchase the Underlying Equity Securities to be added to the applicable Equity Investment as described under “Equity Investments”.

With respect to Canadian Bonds and U.S. Bonds, the three-year inter-bank zero coupon swap rates can be calculated at any time by applying industry-standard bootstrapping methodology for determining zero coupon rates to inter-bank swap rates quoted by Bloomberg. The three-year inter-bank swap rate is posted daily by Bloomberg and can also be used to calculate the corresponding zero coupon swap rate by applying an industry standard fixed income calculation. The three-year inter-bank swap rate is a fixed wholesale reference rate widely used by financial institutions to establish the fixed rate term equivalent of short term funding for borrowers with a DBRS A/AA (or equivalent) credit rating. The Bank has been advised by Bloomberg that Bloomberg inter-bank swap rates provided under its Interest Rate Swap Rate Services on the CDSW5 Bloomberg page (for Canadian swap rates) and the UUSW1 Bloomberg page (for United States swap rates) are automatically generated through the use of a time-window adaptive algorithm that produces composite prices based on the weighted median of bid and ask prices for swaps from at least three market dealers that regularly contribute quotes through Bloomberg. The algorithm estimates the price obsolescence time window based on current price liquidity and self-tunes its operating parameters on a regular basis according to the dynamics of the input data. Bloomberg has advised that this algorithm is intended to provide for timely and accurate reaction to market changes during high liquidity periods while also providing for smooth outputs as liquidity drops. The bid and ask prices quoted by market dealers are subject to three levels of spike detection – pre-update, post-update and look-back, with any bid and ask prices that are identified by Bloomberg as true spikes being excluded from the calculation of the swap rate. The three-year Canadian inter-bank zero coupon discount factor quoted by Bloomberg as of June 7, 2018 was approximately 0.941975 and the corresponding three-year Canadian dollar inter-bank zero coupon swap rate as of June 7, 2018 was approximately 2.000680%. The three-year United States inter-bank zero coupon discount factor quoted by Bloomberg as of June 7, 2018 was approximately 0.928366 and the corresponding three-year United States dollar inter-bank zero coupon swap rate as of June 7, 2018 was approximately 2.482008%.

The Debt Securities do not represent an interest in any Bond, and holders will have no right or entitlement to any Bond, including any interest paid on such Bonds. There is no requirement for the Bank to hold any interest in the Bonds.

**Partial Principal Repayments:**

Holders will receive partial repayments of the Principal Amount equal to the sum of (a) the amount of any Canadian Equity Distributions (defined below) paid during the immediately preceding calendar quarter (the “**Canadian Partial Principal Repayments**”) and (b) the amount of any U.S. Equity Distributions (defined below) paid during the immediately preceding calendar quarter, converted to Canadian dollars at the CAD/USD Foreign Exchange Rate for the last day of such calendar quarter (the “**U.S. Partial Principal Repayments**”) and together with the Canadian



Partial Principal Repayments, the “**Partial Principal Repayments**”), to a maximum of \$99.00 per Debt Security over the term of the Debt Securities.

The Partial Principal Repayments will be calculated and payable in Canadian dollars quarterly no later than the fifth Business Day following the end of each calendar quarter during the term of the Debt Securities other than the calendar quarter in which the Final Valuation Date falls, except as provided below. In addition, any non-cash U.S. Equity Distributions will be converted into their notional cash value, as determined by the Calculation Agent acting in good faith, converted to Canadian dollars at the CAD/USD Foreign Exchange Rate for the last day of the calendar quarter in which such non-cash U.S. Equity Distributions are paid, and paid out in Canadian dollars as U.S. Partial Principal Repayments following the end of each calendar quarter in which such non-cash U.S. Equity Distributions are paid, other than the calendar quarter in which the Final Valuation Date occurs. Any non-cash Canadian Equity Distributions will be converted into their notional cash value, as determined by the Calculation Agent acting in good faith, and paid out in Canadian dollars as Canadian Partial Principal Repayments following the end of each calendar quarter in which such non-cash Canadian Equity Distributions are paid, other than the calendar quarter in which the Final Valuation Date occurs.

Notwithstanding the foregoing, if in any calendar quarter the cumulative total of Partial Principal Repayments otherwise payable in that and all previous calendar quarters would exceed \$99.00 per Debt Security, then in that and all subsequent calendar quarters no Partial Principal Repayments shall be made on the Debt Securities. In such circumstances, (a) Canadian Equity Distributions (or the cash value of non-cash Canadian Equity Distributions) will be notionally reinvested in the Canadian Portfolio on the first Business Day of the next calendar quarter in accordance with the allocation of the Canadian Portfolio at the beginning of such calendar quarter and (b) interest (“**Pre-Maturity Interest**”) shall accrue on the Outstanding Principal Amount (defined below) of each such Debt Security equal to the amount of any notional U.S. Equity Distributions received on the U.S. Portfolio in that calendar quarter, converted to Canadian dollars at the applicable CAD/USD Foreign Exchange Rate on the last Business Day of such quarter. Any Pre-Maturity Interest which so accrues in a calendar quarter shall be paid no later than the fifth Business Day following the end of each calendar quarter during the term of the Debt Securities, other than the calendar quarter in which the Final Valuation Date falls, except as provided below.

Notwithstanding the foregoing, any U.S. Partial Principal Repayment or Pre-Maturity Interest attributable to a U.S. Extraordinary Distribution (defined below) (or a portion thereof) will be payable on a Business Day to be determined by the Calculation Agent, as described under “Extraordinary Distributions” below. Canadian Extraordinary Distributions will be reinvested in the Canadian Portfolio.

The amount of any U.S. Equity Distributions shall be calculated net of a percentage reduction for withholding taxes that generally would be imposed by jurisdictions other than the United States and Canada on dividends paid to a resident of Canada on U.S. Underlying Equity Securities of U.S. Underlying Equity Security Issuers which are neither “United States Persons” as defined for United States withholding tax purposes nor U.S. Underlying Equity Security Issuers which are resident in Canada (“**Non-U.S. Issuers**”), based on their respective weightings in the U.S. Portfolio. As such percentage reduction is generally expected to be 15%, the combined application of such withholding and of the withholding referred to in the paragraph below would generally result in a combined percentage reduction of approximately 27% for U.S. Equity Distributions associated with dividends paid on U.S. Underlying Equity Securities of non-U.S. Issuers.

In addition, the Bank will withhold from each U.S. Partial Principal Repayment, any Pre-Maturity Interest payments and the portion of the Final Distribution Amount (defined below) attributable to U.S. Equity Distributions (each, a “**Subject Payment**”) and remit to the Internal Revenue Service an amount equal to the

product of (x) the rate of United States withholding generally applicable to each Canadian holder of U.S. Underlying Equity Securities on dividends and (y) the Subject Payment being made to such investor (such amount, the “**IRS Remittance**”), assuming for the purposes of this calculation that all of the U.S. Underlying Equity Security Issuers are “United States Persons” as defined for the purposes of United States tax law (“**U.S. Issuers**”) (regardless of whether any U.S. Underlying Equity Security Issuers are foreign persons for such purposes). Upon a sale of the Debt Security, a Non-United States Holder (defined in Appendix B) is deemed to receive any dividend equivalent amount that has accrued on the Debt Security up until the date of sale. The Bank will also withhold and remit to the Internal Revenue Service tax on such amounts. In the case of a Canadian resident investor that is generally subject to United States withholding at a rate of 15% on United States source dividends, this would result in such investor receiving as a Subject Payment an amount that will be reduced by the IRS Remittance. In the case of an RRSP, RRIF or DPSP which is not subject to United States withholding, the Bank will generally not withhold an amount for the IRS Remittance from the Subject Payment received by such RRSP, RRIF or DPSP. The Subject Payments would remain subject to the possible reductions described below in connection with the Reference Hedge. Please see Appendix B below for more information.

The Bank may, but is not obligated to, hedge its obligations under the Debt Securities. If and to the extent that United States withholding taxes would become payable in respect of dividend equivalent payments made to the Reference Holder (defined in Appendix B) under the Reference Hedge (defined in Appendix B), the applicable U.S. Partial Principal Repayments or other Subject Payments will be reduced. In particular, the amount of any U.S. Equity Distributions will be reduced by a percentage generally equal to the rate of United States withholding tax (currently 15%) that would be payable (for the corresponding period) in respect of payments to the Reference Holder under the Reference Hedge (with a resulting reduction in the amount of the Variable Return (defined below)). The reduced amount will be converted into Canadian dollars at the applicable CAD/USD Foreign Exchange Rate to determine the amount of the applicable Subject Payments. See “Certain United States Federal Income Tax Considerations” in Appendix B for a more detailed discussion of this risk.

For purposes of the above calculations, in determining the attributes of the Reference Hedge, the Calculation Agent shall, in its judgment, acting reasonably, seek to minimize adverse tax consequences to the Reference Holder. The Bank will disclose the amount of any notional U.S. (or other) withholding taxes in respect of payments under the Reference Hedge at [www.rbcnotes.com](http://www.rbcnotes.com).

“**Canadian Equity Distributions**” means any dividends or other distributions paid by the Canadian Underlying Equity Security Issuers on the Canadian Underlying Equity Securities notionally included in the Canadian Portfolio that are not Canadian Extraordinary Distributions.

“**U.S. Equity Distributions**” means any dividends or other distributions paid by the U.S. Underlying Equity Security Issuers on the U.S. Underlying Equity Securities notionally included in the U.S. Portfolio, including any U.S. Extraordinary Distributions that are not Reinvested Extraordinary Distributions.

Other than the Partial Principal Repayments and any Pre-Maturity Interest, no other payment on the Debt Securities will be payable by the Bank during the term of the Debt Securities.

**Extraordinary Distributions:**

Canadian Extraordinary Distributions paid during the immediately preceding calendar quarter will be notionally reinvested in the Canadian Portfolio on a Business Day to be determined by the Calculation Agent in accordance with the allocation of the Canadian Portfolio on the date of reinvestment. With respect to Canadian Extraordinary Distributions, the Calculation Agent will have discretion in

determining the timing of such notional reinvestment and whether non-cash Canadian Extraordinary Distributions will be notionally added to the Canadian Portfolio in accordance with the restrictions placed on the Canadian Portfolio by the Canadian Model or converted to their notional cash value and notionally reinvested in the Canadian Portfolio in accordance with the allocation of the Canadian Portfolio on the date of reinvestment.

Canadian Underlying Equity Securities and Canadian Bonds to be notionally purchased as a result of Canadian Extraordinary Distributions will be purchased on a *pro rata* basis, based on their then current weighting in the Canadian Portfolio, unless the Canadian Portfolio consists entirely of a Canadian Fixed Income Investment at such time, in which case a Canadian Bond will be notionally purchased in the manner described under “Fixed Income Investments”. Any Underlying Equity Securities will be notionally purchased at a price to be determined by the Calculation Agent, acting in good faith. Any Canadian Bonds will be notionally purchased as described under “Fixed Income Investments” above.

**“Canadian Extraordinary Distributions”** means any dividends or other distributions paid by a Canadian Underlying Equity Security Issuer on the Canadian Underlying Equity Securities notionally included in the Canadian Portfolio that could reasonably be considered to have been received as a consequence or result of a one-time, non-recurring or unusual event or circumstance, as determined by the Calculation Agent acting in good faith.

The amount of any U.S. Extraordinary Distributions, other than Reinvested Extraordinary Distributions, paid during the immediately preceding calendar quarter will be paid out as a U.S. Partial Principal Repayment or Pre-Maturity Interest, as described under “Partial Principal Repayments” above. Reinvested Extraordinary Distributions paid during the immediately preceding calendar quarter will be notionally reinvested in the U.S. Portfolio in accordance with the allocation of the U.S. Portfolio on the date of reinvestment, except as provided below. With respect to U.S. Extraordinary Distributions, the Calculation Agent will have discretion in determining the timing of such repayment and/or notional reinvestment and whether non-cash Reinvested Extraordinary Distributions will be notionally added to the U.S. Equity Investment in accordance with the restrictions placed on the U.S. Equity Investment by the U.S. Model or converted to their notional cash value and notionally reinvested in the U.S. Portfolio in accordance with the allocation of the U.S. Portfolio on the date of reinvestment.

U.S. Underlying Equity Securities and U.S. Bonds to be notionally purchased as a result of Reinvested Extraordinary Distributions will be purchased on a *pro rata* basis, based on their then current weighting in the U.S. Portfolio, unless the U.S. Portfolio consists entirely of a U.S. Fixed Income Investment at such time, in which case a U.S. Bond will be notionally purchased in the manner described under “Fixed Income Investments”. Any U.S. Underlying Equity Securities will be notionally purchased at a price to be determined by the Calculation Agent, acting in good faith. Any U.S. Bonds will be notionally purchased as described under “Fixed Income Investments” above.

**“U.S. Extraordinary Distributions”** means any dividends or other distributions paid by a U.S. Underlying Equity Security Issuer on the U.S. Underlying Equity Securities notionally included in the U.S. Equity Investment that could reasonably be considered to have been received as a consequence or result of a one-time, non-recurring or unusual event or circumstance, as determined by the Calculation Agent acting in good faith.

**“Reinvested Extraordinary Distributions”** means the portion of any U.S. Extraordinary Distributions determined by the Calculation Agent to be free of United States or other withholding taxes, after review of the applicable U.S. Underlying Equity Security Issuer’s communications, consultation with such U.S.

Underlying Equity Security Issuer, or other reliable means of determining the taxable nature of the U.S. Extraordinary Distribution.

**Outstanding Principal Amount:** The “**Outstanding Principal Amount**” on each \$100 Principal Amount per Debt Security at any particular time will be equal to: (i) \$100 minus (ii) the sum of all the Partial Principal Repayments (before deducting withholding tax, if any) made on the Debt Security at or prior to the particular time.

**Variable Return:** The “**Variable Return**” on each \$100 Principal Amount per Debt Security will be calculated by the Calculation Agent on the Final Valuation Date and will be equal to: (i) the NAV per Debt Security (defined below) minus (ii) the Outstanding Principal Amount in respect of such Debt Security. The Variable Return may be positive or negative.

**Valuation of the Debt Securities:** The value of the Portfolios (the “**Value of the Portfolios**”) for the Debt Securities on any Business Day will be calculated by the Calculation Agent and will be equal to the sum of the proceeds from the notional disposition of any Equity Investments and Fixed Income Investments that are in the Portfolios on such Business Day, plus, without duplication, (a) any cash not yet notionally invested, (b) the value of any notionally outstanding Currency Forward (defined below), (c) on the Final Valuation Date and any of the Exchange Days between the Final Currency Forward Date (defined below) and the Final Valuation Date, the final Settlement Amount (defined below), if any, (d) an amount equal to the sum of any Canadian Equity Distributions and Canadian Extraordinary Distributions (or the cash value of non-cash Canadian Equity Distributions and Canadian Extraordinary Distributions, as determined by the Calculation Agent acting in good faith) not yet paid to holders as a Canadian Partial Principal Repayment or reinvested in the Canadian Portfolio, as applicable, at such time and (e) an amount (the “**Final Distribution Amount**”) equal to the sum of (i) any Reinvested Extraordinary Distributions (or the cash value of non-cash Reinvested Extraordinary Distributions, as determined by the Calculation Agent acting in good faith) that have not yet been notionally reinvested in the U.S. Portfolio and (ii) the amount of any U.S. Equity Distributions (or the cash value of non-cash U.S. Equity Distributions, as determined by the Calculation Agent acting in good faith) not yet paid to holders as a Partial Principal Repayment or Pre-Maturity Interest, as applicable, at such time, calculated by the Calculation Agent net of a percentage reduction for withholding taxes that generally would be imposed by jurisdictions other than the United States and Canada on dividends paid to a resident of Canada by Non-U.S. Issuers, expressed in Canadian dollars converted using the Daily Exchange Rate (defined below) for the day such calculation is made, provided that any calculations with respect to the Redemption Amount will be calculated based on the CAD/USD Foreign Exchange Rate, if applicable, on the Final Valuation Date.

The “**Value of the Canadian Portfolio**” on any Business Day will be calculated by the Calculation Agent in accordance with the first paragraph of this section, however, such calculations will only take into account the notional disposition of any Canadian Equity Investment or Canadian Fixed Income Investment included in the Canadian Portfolio at such time, plus, without duplication, (a) any cash allocated to the Canadian Portfolio but not yet notionally invested in the Canadian Portfolio and (b) an amount equal to the sum of any Canadian Equity Distributions and Canadian Extraordinary Distributions (or the cash value of non-cash Canadian Equity Distributions and Canadian Extraordinary Distributions, as determined by the Calculation Agent acting in good faith) not yet paid to holders as a Canadian Partial Principal Repayment or reinvested in the Canadian Portfolio, as applicable, at such time.

The “**Value of the U.S. Portfolio**” on any Business Day will be calculated by the Calculation Agent in accordance with the first paragraph of this section, however, such calculations will only take into account the notional disposition of any U.S. Equity Investment or U.S. Fixed Income Investment included in the U.S. Portfolio

at such time, plus, without duplication, (a) any cash allocated to the U.S. Portfolio but not yet notionally invested in the U.S. Portfolio, (b) the value of any notionally outstanding Currency Forward, (c) on the Final Valuation Date and any of the Exchange Days between the Final Currency Forward Date and the Final Valuation Date, the final Settlement Amount, if any, and (d) an amount equal to the Final Distribution Amount.

The net value of the Canadian Portfolio (the “**Net Value of the Canadian Portfolio**”) for the Debt Securities on any Business Day will be calculated by the Calculation Agent and will be the Value of the Canadian Portfolio less the Canadian Ongoing Annual Amount (defined below).

The net value of the U.S. Portfolio (the “**Net Value of the U.S. Portfolio**”) for the Debt Securities on any Business Day will be calculated by the Calculation Agent and will be the Value of the U.S. Portfolio less the U.S. Ongoing Annual Amount (defined below).

The net value of the Portfolios (the “**Net Value of the Portfolios**”) for the Debt Securities on any Business Day will be calculated by the Calculation Agent and will be the sum of the Net Value of the Canadian Portfolio and the Net Value of the U.S. Portfolio.

The upfront portion of the Note Program Amount will be satisfied on the Issue Date from the proceeds of the offering, thereby reducing the number of Underlying Equity Securities and/or the value of Bonds, as the case may be, that would have been otherwise notionally included initially in the Portfolios and therefore the initial NAV per Debt Security, the Variable Return and the Redemption Amount. The Canadian Ongoing Annual Amount and U.S. Ongoing Annual Amount will be calculated based on the Value of the Canadian Portfolio and the Value of the U.S. Portfolio, respectively, and will accrue daily and be satisfied quarterly in arrears by liquidating a *pro rata* (based on their then current weighting in the applicable Portfolio) number of Underlying Equity Securities notionally held in the applicable Equity Investment and a *pro rata* portion of the applicable Fixed Income Investment, as the case may be, thereby reducing the number of Underlying Equity Securities and/or the value of Bonds notionally included in the Portfolios and therefore the NAV per Debt Security, the Variable Return and the Redemption Amount.

The NAV per Debt Security (the “**NAV per Debt Security**”) for the Debt Securities on any Business Day will be equal to the Net Value of the Portfolios divided by the number of Debt Securities outstanding on such Business Day and will be expressed in Canadian dollars.

48.92% of the Principal Amount of the Debt Securities will be converted into United States dollars on the Initial Valuation Date at the CAD/USD Foreign Exchange Rate for the immediately preceding day for which such rate is posted, and then will be notionally invested in the U.S. Portfolio on the Issue Date. The remaining 48.93% of the Principal Amount will be notionally invested in the Canadian Portfolio on the Issue Date. The NAV per Debt Security will be approximately \$97.85 on the Issue Date.

Notional investments in the U.S. Portfolio will be denominated in United States dollars.

The NAV per Debt Security will fluctuate throughout the term with the Net Value of the Portfolios, which will be affected by the Daily Exchange Rate, and may also be affected by a number of other factors beyond the control of the Bank. As a result, the Redemption Amount will not be determinable before the Maturity Date.

See “Risk Factors”. The Calculation Agent may suspend the determination of the NAV per Debt Security during the existence of any state of affairs that makes those determinations impossible, impractical or prejudicial to holders of the Debt Securities.

“**Daily Exchange Rate**” means the exchange rate as provided by Reuters daily, using the Reuters Instrument Code “CAD=“.

**Payment at Maturity:**

At maturity, each holder of a Debt Security will receive a payment in Canadian dollars equal to the Redemption Amount. The “**Redemption Amount**” on each \$100 Principal Amount per Debt Security will be equal to the greater of: (i) the Outstanding Principal Amount of such Debt Security, plus the Variable Return (which may be positive or negative); and (ii) \$1.00.

**Partial Currency Hedge:**

The Debt Securities will provide a partial hedge of the potential currency risk between the Canadian dollar currency in which the Debt Securities and all payments under the Debt Securities, including payment of the Redemption Amount at maturity, are denominated, and the United States dollar currency in which the U.S. Underlying Equity Securities or U.S. Bonds are denominated, through the notional use of the currency hedge described below.

On the last Business Day of the calendar month immediately prior to the Initial Valuation Date (the “**Initial Currency Forward Date**”) and on the last Business Day of each calendar quarter thereafter, the Calculation Agent will assume that the U.S. Portfolio is partially hedged through a notional cash-settled three-month forward contract (the “**Currency Forward**”) to purchase a number of Canadian dollars in respect of the United States dollar equivalent of the Net Value of the U.S. Portfolio on such date (adjusted as described below), as determined by the Calculation Agent, acting in good faith. The rate applicable to any Currency Forward will be equal to the Reference Rate (defined below) on such date.

The “**Reference Rate**” on any date with respect to any Currency Forward will be equal to the market rate quoted to the Calculation Agent by a provider of currency forwards on such date, which market rate is typically similar to (but not precisely the same as) the market rate posted by the Bloomberg composite quotation system on such date. Such market rate will be (a) quoted by a provider that is independent of the Calculation Agent or (b) the best rate among rates quoted by four providers (which may include an affiliate of the Calculation Agent but will include at least three providers that are independent of the Calculation Agent).

If the Initial Currency Forward Date is not the last Business Day of a calendar quarter, the initial Currency Forward shall (a) have a term equal to the period of time between the Initial Currency Forward Date and the last Business Day of the next calendar quarter (the “**Initial Currency Forward Period**”), and (b) have a rate equal to the Reference Rate on such date for a period equal to the Initial Currency Forward Period (i.e. if the Initial Currency Forward Period is two months, the 2-month forward rate).

If the Final Valuation Date is not the last Business Day of a calendar quarter, the final Currency Forward shall (a) have a term equal to the period of time (the “**Final Currency Forward Period**”) between the last Business Day of the most recently completed calendar quarter prior to the Final Valuation Date and the last Business Day of the calendar month immediately prior to the Final Valuation Date (the “**Final Currency Forward Date**”), and (b) have a rate equal to the Reference Rate on such last Business Day of the most recently completed calendar quarter prior to the Final Valuation Date for a period equal to the Final Currency Forward Period (i.e. if the Final Currency Forward Period is two months, the 2-month forward rate).

On the last Business Day of each calendar quarter following the Issue Date (other

than the calendar quarter that includes the Final Valuation Date), the Net Value of the U.S. Portfolio, calculated by the Calculation Agent using the CAD/USD Foreign Exchange Rate on such date, will be adjusted as follows:

(i) if a Settlement Amount is notionally payable to the seller of United States dollars under the Currency Forward, such amount, as converted to United States dollars at the CAD/USD Foreign Exchange Rate on the last Business Day of such quarter, will be used to notionally acquire U.S. Underlying Equity Securities and/or U.S. Bonds for the U.S. Portfolio on the Business Day immediately following the last Business Day of such quarter. Such U.S. Underlying Equity Securities and/or U.S. Bonds will be notionally acquired on a *pro rata* basis, based on their then current weighting in the U.S. Portfolio. Any U.S. Underlying Equity Securities will be notionally acquired at the Volume Weighted Average Price of the U.S. Underlying Equity Securities on the Exchange Day immediately following the last Exchange Day of such quarter. Any U.S. Bonds will be notionally acquired as described under “Fixed Income Investments” above; and

(ii) if a Settlement Amount is notionally payable to the purchaser of United States dollars under the Currency Forward, U.S. Underlying Equity Securities and/or U.S. Bonds equal in value to such amount, as converted to United States dollars at the CAD/USD Foreign Exchange Rate on the last Business Day of such quarter, will be notionally sold from the U.S. Portfolio. Such U.S. Underlying Equity Securities and/or U.S. Bonds will be notionally sold on the Business Day immediately following the last Business Day of such quarter. Such U.S. Underlying Equity Securities and/or U.S. Bonds will be notionally sold on a *pro rata* basis, based on their then current weighting in the U.S. Portfolio. Any U.S. Underlying Equity Securities will be notionally sold at the Volume Weighted Average Price of the U.S. Underlying Equity Securities on the Exchange Day immediately following the last Exchange Day of such quarter. Any U.S. Bonds will be notionally sold as described under “Fixed Income Investments” above.

**“CAD/USD Foreign Exchange Rate”** means the WM/Reuters intraday spot exchange rate between the Canadian dollar and the United States dollar produced by Reuters and published as the 4 p.m. ET rate. The Bank will publish the applicable CAD/USD Foreign Exchange Rates at [www.rbcnotes.com](http://www.rbcnotes.com).

**“Settlement Amount”** means, on any date, the notional amount that would be payable to the seller or the purchaser of United States dollars as a result of the notional settlement of the Currency Forward. Such Settlement Amount is based on the difference between the exchange rate set by the Currency Forward and the CAD/USD Foreign Exchange Rate on the last Business Day of the calendar quarter (or, where applicable, the Final Currency Forward Date). The Settlement Amount may be positive or negative: if it is positive, such Settlement Amount would be payable to the seller of United States dollars, and if it is negative, such Settlement Amount would be payable to the purchaser of United States dollars.

The amount of any change in the Net Value of the U.S. Portfolio between the Issue Date and the last Business Day of each calendar quarter thereafter, including the United States dollar amount of any notional dividends or other distributions which determine the amount of any U.S. Partial Principal Repayment, will be exposed to fluctuations in the exchange rate between the Canadian dollar and the United States dollar over that period.

The amount of any change in the Net Value of the U.S. Portfolio between the last Business Day of each calendar year and the last Business Day of the following calendar quarter due to the annual rebalancing and the full Value of the U.S. Portfolio between the Final Currency Forward Date and the Final Valuation Date will be exposed to fluctuations in the exchange rate between the Canadian dollar

and the United States dollar over that period.

See “Net Value of the U.S. Portfolio Calculation Examples” in Appendix C for hypothetical examples of the calculation of the Net Value of the U.S. Portfolio on the last day of each calendar quarter.

**Publication of NAV:**

To assist investors in determining whether they wish to sell their Debt Securities prior to maturity, the Bank will publish the most recent net bid price of the Debt Securities (being primarily based on the NAV per Debt Security but which could also be influenced by a number of other factors), if any, and the daily NAV per Debt Security at [www.rbcnotes.com](http://www.rbcnotes.com). The most recent net bid price takes into account the applicable Early Trading Charge (defined below), if any, upon the sale of Debt Securities prior to maturity.

**Issuer Credit Rating:**

Moody's:	A1
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 and “Risk Factors” in this pricing supplement.

**Extraordinary Events and  
Substitution Events:**

**Extraordinary Events**

Determination of the NAV per Debt Security may be postponed, or the Bank can accelerate determination of the NAV per Debt Security 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. In the event that the NAV per Debt Security (as published by the Bank) falls to \$20.00 or less, the Bank may declare that an Extraordinary Event has occurred and the Calculation Agent generally will, among other things, cease to assume thereafter that the U.S. Portfolio is notionally partially hedged through Currency Forwards, commencing on the Exchange Day following such declaration. In addition, for purposes of the Debt Securities, an “Extraordinary Event” will be deemed to have occurred at any time that United States withholding taxes would be payable in respect of payments to the Reference Holder under the Reference Hedge. For the purposes of determining the Actualized Fair Value (defined in the product supplement) per Debt Security upon the occurrence of an Extraordinary Event, in addition to the specific factors described in the product supplement and any other factors that are relevant in the circumstances, the Calculation Agent will determine such Actualized Fair Value per Debt Security on the basis of the then Outstanding Principal Amount.

**Substitution Events**

Upon the determination by the Calculation Agent that a Substitution Event has occurred in respect of an Underlying Equity Security or Underlying Equity Securities in a Portfolio (each, an “**Affected Underlying Equity Security**” and, collectively, the “**Affected Underlying Equity Securities**”), the following will apply:

- (i) such Affected Underlying Equity Security will be notionally sold over the five Exchange Days commencing on and immediately following the Substitution Date (defined below), or such shorter period commencing on the Substitution Date for which the Closing Prices or Volume Weighted



Average Prices, as applicable, are available, from the applicable Equity Investment and the proceeds from such disposition will be used to notionally purchase over the same period the highest-ranked stock eligible for inclusion that is not already notionally included in such Equity Investment as determined by the applicable Model (the “**Replacement Underlying Equity Security**”);

(ii) the Replacement Underlying Equity Security will be an Underlying Equity Security in such Equity Investment and the issuer of such Replacement Underlying Equity Security will be an Underlying Equity Security Issuer in respect of such Replacement Underlying Equity Security;

(iii) the Calculation Agent will determine the applicable values for both the Affected Underlying Equity Security and the Replacement Underlying Equity Security based on the average of the Closing Prices for the five Exchange Days commencing on and immediately following the Substitution Date, or such shorter period commencing on the Substitution Date for which the Closing Prices are available, with respect to such stocks in the Canadian Equity Investment and based on the arithmetic mean of the Volume Weighted Average Price for the five Exchange Days commencing on and immediately following the Substitution Date, or such shorter period commencing on the Substitution Date for which the Volume Weighted Average Prices are available, with respect to such stocks in the U.S. Equity Investment; and

(iv) if no Replacement Underlying Equity Security is eligible for notional inclusion in the applicable Equity Investment, the notional proceeds will be used to purchase the applicable Bonds, as described under “Fixed Income Investments”.

Upon selection of a Replacement Underlying Equity Security by the Calculation Agent, the Bank will promptly give details of such substitution and brief details of the Substitution Event to holders by posting such details at [www.rbcnotes.com](http://www.rbcnotes.com).

“**Substitution Date**” means the Exchange Day on which the Calculation Agent determines that a Substitution Event has occurred, provided that the Substitution Date may be a later date if any event or circumstance impedes the calculation of the applicable Model or the making of any necessary changes to the applicable Portfolio.

See “Description of the Equity, Unit and Debt Linked Securities – Adjustments upon the occurrence of a Substitution Event” in the product supplement.

#### **Summary of Fees and Expenses:**

#### **Commission and Agency Fees Payable to the Dealers**

A commission of 2.00% 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 be paid to Laurentian Bank Securities Inc. out of the upfront portion of the Note Program Amount referred to below 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 NAV per Debt Security on the Issue Date will be approximately \$97.85, which will indirectly reflect the payment of the 2.00% commission referred to above, and the satisfaction of the upfront portion of the Note Program Amount (including the agency fee up to 0.15%). The selling commissions and the upfront portion of the Note Program Amount (including the agency fee up to 0.15%) will be indirectly borne by holders of the Debt Securities. There are no fees directly payable by a holder of Debt Securities.

#### **Note Program Amount**

As an allowance for the management of the Debt Securities, the Bank will be entitled to and will retain an upfront note program amount of 0.15% of the Principal Amount of the Debt Securities issued under this offering. An agency fee will be paid out of the upfront portion of the Note Program Amount to Laurentian Bank Securities Inc. 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 NAV per Debt Security on the Issue Date will indirectly reflect the satisfaction of the commission and the 0.15% upfront portion of the Note Program Amount. In addition, as an allowance for the ongoing management of the Debt Securities, the Bank will be entitled to ongoing annual amounts of 1.65% of the Value of the Canadian Portfolio (the “**Canadian Ongoing Annual Amount**”) and 1.85% of the Value of the U.S. Portfolio (the “**U.S. Ongoing Annual Amount**” and together with the Canadian Ongoing Annual Amount, the “**Ongoing Annual Amounts**”). The upfront amount and the Ongoing Annual Amounts are referred to as the “**Note Program Amount**”. The Ongoing Annual Amounts will be calculated daily and satisfied quarterly in arrears, therefore reducing the NAV per Debt Security, the Variable Return and the Redemption Amount.

The Note Program Amount is an amount retained by the Bank to compensate it for creating and issuing the Debt Securities, maintaining the Strategies, the Models and the Portfolios, allowing for profit (which may or may not be realized) and costs relating to the Debt Securities (which may or may not include any costs of hedging its obligations thereunder).

The upfront portion of the Note Program Amount and the selling commissions result in the initial estimated value of the Debt Securities on the Issue Date being less than their public offering price.

### **Service Fees**

The Bank will pay, from the Note Program Amount, a service fee or trailing commission equal to 1.00% per annum of the Value of the Portfolios to sales representatives of qualified selling members in respect of Debt Securities held by their clients. The service fee will begin accruing on the first anniversary of the Issue Date and will be satisfied quarterly in arrears thereafter.

### **General**

The entitlement of the Bank to the Ongoing Annual Amounts will accrue daily and be satisfied quarterly in arrears by liquidating a *pro rata* (based on their then current weighting in the Portfolio) number of Underlying Equity Securities notionally held in each Equity Investment and/or a portion of each Fixed Income Investment, as applicable, thereby reducing the number of Underlying Equity Securities and/or the value of the Bonds, as applicable, notionally included in each Portfolio and therefore reducing the Value of the Portfolios. The number of Underlying Equity Securities and/or the value of the Bonds, as applicable, initially notionally purchased will take into account the 2.00% Dealer commission and the 0.15% upfront portion of the Note Program Amount (including the agency fee of up to 0.15%). The Bank will not receive any other amount or seek reimbursement of any other expense. All other expenses of the offering (other than the selling commission and the Note Program Amount, including the agency fee, described above) will be borne by the Bank.

### **Dollar Value of Fees**

Assuming that an investor purchases Debt Securities with an aggregate Principal Amount of \$100, each of the Value of the Canadian Portfolio and the Value of the U.S. Portfolio increases at a constant rate of 5% *per annum* and no Extraordinary Event occurs during the term of the Debt Securities, the selling commissions and

Note Program Amount will reduce the return that otherwise would have been earned by an investor by a cumulative total of \$1.74 after one year, \$5.40 after three years, \$9.30 after five years and \$20.06 as of the Maturity Date (approximately ten years). All dollar amounts are rounded to the nearest whole cent. In this scenario, the payment at maturity would be \$135.11 (equivalent to an annually compounded rate of return of 3.077%).

The above-noted dollar values, the Value of the Canadian Portfolio and the Value of the U.S. Portfolio are used for illustration purposes only. These calculations and the assumption of the Value of the Canadian Portfolio and the Value of the U.S. Portfolio's growth rates are not estimates or forecasts of the Value of the Portfolios, and therefore the Ongoing Annual Amounts on an annual basis, respectively. The actual performance of the Debt Securities and, consequently, the expenses indirectly borne by investors, may vary.

In order for the payment at maturity to exceed the Principal Amount of the Debt Securities, the return generated by the Portfolios from the Issue Date to the Maturity Date, after being converted into Canadian dollars at the CAD/USD Foreign Exchange Rate for the Final Valuation Date where applicable, will have to exceed the applicable selling commissions and Note Program Amount. An early trading charge may also apply. See "Secondary Market" below.

**Eligibility for Investment:**

Eligible for RRSPs, RRIFFs, RESPs, RDSPs, DPSPs and TFSA's. See "Eligibility for Investment" in Appendix B, 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 Value of the Portfolios. 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.

*Possible Lack of Diversification*

Except with respect to High Risk Country Stocks included in the U.S. Index, the Models do not rely on any subjective inputs or discretionary investment judgments by a portfolio manager in respect of the Underlying Equity Securities or Underlying Equity Security Issuers in the composite universe. Instead it uses trailing Price to Earnings, trailing Reinvestment Rates, "Earnings Surprise", 3-Month Estimate Revisions, 3-Month Price Change and 5-Year Beta, as inputs. In addition to these inputs, average daily dollar trade volumes are used in the Eligibility Criteria. Due to their objective nature, the Models could result in the Portfolios favouring sectors that demonstrate the Models' desired characteristics, thus reducing the overall diversification of the Portfolios in circumstances where the Portfolios are composed entirely of Equity Investments. The Models have not been designed to produce sector neutral Equity Investments. The overall diversification could be further reduced in circumstances where the Portfolios are composed in whole or in part of Fixed Income Investments, as one or both Portfolios could be notionally invested in zero coupon bonds.

*Model Not a Predictor of Growth Potential in all Market Conditions*

Under certain market conditions, some or all of the factors used by the Models to project future return potential may lose their predictive power. Following a market bottom when stocks with traditionally undesirable investment metrics sometimes

become the best performing stocks for a limited period of time (sometimes referred to as a “low-quality market rally”), it is not uncommon for the Equity Investments to perform poorly or systematically underperform the Indices for a period of time as a result of the Models relying on the six valuation parameters selected based on traditionally desirable investment metrics. The Models are not designed to mimic or outperform any particular index and accordingly may not perform better than any particular index, whether in periods of positive or negative market conditions.

#### *Exposure to Market Volatility*

The Strategies may not require a reallocation to Fixed Income Investments even if there is market volatility, or the Strategies may not require a reallocation prior to periods of market volatility, as the allocation of the Portfolios between Equity Investments and Fixed Income Investments are based on the trends of stocks in the Indices selected by the Models on the most recent Allocation Date. As the Strategies will not be able to reallocate the Portfolios, in whole or in part, to Fixed Income Investments following an Allocation Date until the next Allocation Date, holders of the Debt Securities will be exposed to any market volatility until the next Allocation Date. In addition, to the extent that a Portfolio is reallocated from an Equity Investment to a Fixed Income Investment, in whole or in part, the applicable Underlying Equity Securities will be notionally sold over the five Exchange Days following the applicable Allocation Date. Accordingly, any notional losses on the Underlying Equity Securities notionally sold at such time would be crystallized as a result of the reallocation of all or a part of such Portfolio on an Allocation Date, which could negatively impact the return on the Debt Securities.

#### *Exposure to Foreign Investments May be Subject to Additional Risks*

While the Bank intends to limit investor exposure to High Risk Country Stocks included in the U.S. Index, Underlying Equity Securities and Bonds that are, or comprise, or that seek to replicate or correspond to the performance of, foreign securities, foreign interest rates, and foreign securities markets, may be more volatile than Canadian securities, interest rates and securities markets. Direct or indirect government intervention to stabilize foreign markets may affect trading prices, rates and volumes in those markets. There may be less publicly-available information about foreign issuers than there is about Canadian issuers subject to the reporting requirements of the Canadian securities regulators, and foreign issuers are subject to accounting, auditing and financial reporting standards and requirements that may be different from those applicable to Canadian reporting issuers.

#### *U.S. Partial Principal Repayments, Pre-Maturity Interest or Final Distribution Amount May Be Reduced*

If and to the extent that United States withholding tax would become payable in respect of dividend equivalent payments made to the Reference Holder under the Reference Hedge, the applicable U.S. Partial Principal Repayments or other Subject Payments will be reduced by a percentage generally equal to the rate of United States withholding tax (currently 15%) that would be payable (for the corresponding period) in respect of payments to the Reference Holder under the Reference Hedge (with a resulting reduction in the amount of the Variable Return). Under certain circumstances, payments under the Reference Hedge may be subject to United States withholding tax, in which case the applicable Subject Payments would be reduced by such rate of United States withholding. As the amount of such payments referable to notional distributions payable on U.S. Underlying Equity Securities of Non-U.S. Issuers generally would have been reduced by the Calculation Agent by reference to withholding taxes applicable in jurisdictions outside Canada at a rate typically of 15%, such payments respecting Non-U.S. Issuers generally would be subject to a double reduction for both United States and non-United States withholding taxes (before taking into account any further reduction to the related Subject Payments made to investors for United States withholding taxes described

above).

By way of illustration, assume that the U.S. Portfolio is allocated entirely to a U.S. Equity Investment, that US\$0.50 in dividends were paid by the U.S. Underlying Equity Security Issuers (all of them assumed to be U.S. Issuers) on the U.S. Underlying Equity Securities notionally included in the U.S. Equity Investment during a calendar quarter prior to the calendar quarter in which the Final Valuation Date falls and that, without taking into account any withholding taxes, the U.S. Partial Principal Repayments for such calendar quarter would otherwise be US\$0.50, converted to Canadian dollars using the applicable CAD/USD Foreign Exchange Rate (as described at “Partial Principal Repayments” above). If payments to the Reference Holder under the Reference Hedge were subject to United States withholding tax at a rate of 15%, the U.S. Partial Principal Repayments for such calendar quarter would be reduced by an amount equal to US\$0.075 (i.e., US\$0.50 multiplied by 15%) to US\$0.425 converted to Canadian dollars using the applicable CAD/USD Foreign Exchange Rate (as described at “Partial Principal Repayments” above). The U.S. Partial Principal Repayments as so reduced would in turn be subject to United States withholding tax on the basis that they are “dividend equivalent payments”. If the U.S. Partial Principal Repayments as so reduced were subject to United States withholding tax at a rate of 15%, the U.S. Partial Principal Repayments for such calendar quarter received by the investors net of such withholding tax would be further reduced by an amount equal to US\$0.06375 (i.e., US\$0.425 multiplied by 15%) to US\$0.36125 converted to Canadian dollars using the applicable CAD/USD Foreign Exchange Rate (as described at “Partial Principal Repayments” above). In addition, proceeds from the sale of Debt Securities may also be subject to United States withholding tax. See Appendix B under “Certain United States Federal Income Tax Considerations”.

The Bank will disclose the amount of any notional United States (or other) withholding taxes in respect of payments under the Reference Hedge at [www.rbcnotes.com](http://www.rbcnotes.com). See “Certain United States Federal Income Tax Considerations” in Appendix B for a more detailed discussion of the risk.

#### *Return may be Limited to Fixed Income Investment Returns*

The return, if any, on the Debt Securities, may be limited to the returns on Fixed Income Investments, which could be limited. There can be no assurance that the Portfolios will be composed of Equity Investments at any point over the term of the Debt Securities. As the allocation of the Portfolios between Equity Investments and Fixed Income Investments is based on the trends of the stocks in the Indices selected by the Models on the most recent Allocation Date, the Strategies could result in the Portfolios being composed of Fixed Income Investments over all or a part of the term of the Debt Securities. The Portfolios may perform poorly or systematically underperform the Indices for a period of time if the Portfolios are composed of Fixed Income Investments during a period of strong equity market performance.

#### *Uncertain Return Until Maturity*

The return, if any, on the Debt Securities will be uncertain until maturity. Whether there is a return on the Debt Securities will depend on the performance of the Portfolios relative to the Outstanding Principal Amount. 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. Depending on the performance of the Portfolios and the amount, if any, of the Partial Principal Repayments and Pre-Maturity Interest, holders of the Debt Securities may not be repaid the amount they invested in the Debt Securities (other than \$1.00 per Debt Security). Historical price levels of the Underlying Equity Securities should not be considered as an indication of the future performance of the Underlying Equity Securities in the Portfolios. Investors should understand that the risk involved in this type of investment is greater than

that normally associated with other types of investments.

#### *Partial Principal Repayments are Uncertain*

The amount of the Partial Principal Repayments is uncertain. Whether Partial Principal Repayments are made will depend on the Canadian Equity Distributions and U.S. Equity Distributions. There can be no assurance that the Underlying Equity Security Issuers will continue to pay dividends or other distributions in the future. Historical dividend or other distribution payments made by the Underlying Equity Security Issuers should not be considered as an indication of the future dividend or other distribution payments of the Underlying Equity Security Issuers. Furthermore, the Partial Principal Repayments will be reduced as a result of an Equity Investment being reduced or eliminated if a Portfolio is reallocated, in whole or in part, to a Fixed Income Investment.

#### *Currency Risk*

The Debt Securities are denominated in Canadian dollars and all payments under the Debt Securities to holders of the Debt Securities, including payment of the Redemption Amount at maturity, will be made in Canadian dollars. Notional investments in the U.S. Portfolio will be denominated in United States dollars.

The effect of the partial currency hedge described above is that a depreciation of the United States dollar versus the Canadian dollar will positively affect the Net Value of the Portfolios at the applicable quarter end, and an appreciation of the United States dollar versus the Canadian dollar will negatively affect the Net Value of the Portfolios at the applicable quarter end. U.S. Partial Principal Repayments and any Pre-Maturity Interest are not affected by the partial currency hedge, as they are calculated based on the applicable CAD/USD Foreign Exchange Rate.

Although the Debt Securities will provide a partial hedge, except as described under “Extraordinary Events” above, of the potential currency risk between the Canadian dollar and the United States dollar, the amount of any change in the Net Value of the U.S. Portfolio between the Issue Date and the last Business Day of each calendar quarter thereafter, including the amount of any notional dividends or other distributions, the amount of any change in the Net Value of the U.S. Portfolio between the last Business Day of each calendar year and the last Business Day of the following calendar quarter due to the annual rebalancing and the full Value of the U.S. Portfolio between the Final Currency Forward Date and the Final Valuation Date, will be exposed to fluctuations in the exchange rate between the Canadian dollar and the United States dollar over that period. The Value of the U.S. Portfolio will be calculated by the Calculation Agent in Canadian dollars converted using the Daily Exchange Rate for the day such calculation is made, provided that any currency conversion calculations with respect to the Redemption Amount will be calculated based on the applicable CAD/USD Foreign Exchange Rate, in each case affected by the partial currency hedge. As a result, there will be currency risk, and performance of the Debt Securities and U.S. Underlying Equity Securities or U.S. Bonds may be affected by currency fluctuations and volatility.

#### *Credit Rating*

The Debt Securities have not been and will not be rated. There can be no assurance that any rating agency would be willing to assign a rating to the Debt Securities, or that if the Debt Securities were rated, they would have the same rating as any other unsubordinated indebtedness of the Bank that is rated.

### *Tax Treatment Different from Investing in Underlying Equity Securities*

Prospective investors should note that the tax treatment resulting from exposure to an Equity Investment through an investment in the Debt Securities is different than, and may be either advantageous or disadvantageous relative to, the tax treatment resulting from exposure to such Equity Investment through a direct holding of the Underlying Equity Securities in such Equity Investment. Accordingly, investors should discuss with their investment and tax advisors the advantages and disadvantages in their particular circumstances of holding the Debt Securities as compared to holding the Underlying Equity Securities. In particular, a prospective investor in the Debt Securities should note that:

- If the Underlying Equity Securities in an Equity Investment were held by an investor directly, the investor would receive taxable dividends or other distributions. If the investor obtains exposure to the Underlying Equity Securities in an Equity Investment through an investment in the Debt Securities, the investor will receive Partial Principal Repayments equal to the sum of (i) any Canadian Equity Distributions and (ii) any U.S. Equity Distributions, and Canadian Extraordinary Distributions and Reinvested Extraordinary Distributions will be notionally reinvested, which amounts should not be included in the investor's income when received by the investor or reinvested, as the case may be (but which would have the effect of increasing the Variable Return which would be realized on maturity of the Debt Securities).
- If the Underlying Equity Securities in an Equity Investment were held by an investor directly as capital property, any gain on a disposition of the Underlying Equity Securities by the investor would ordinarily be taxed as a capital gain. If the investor obtains exposure to the Underlying Equity Securities in an Equity Investment through an investment in the Debt Securities, any gain on the disposition of the Debt Securities will be taxed as ordinary income, including any gain resulting from the reduction in the Principal Amount as a consequence of prior Partial Principal Repayments.
- If the U.S. Underlying Equity Securities in a U.S. Equity Investment were held directly as capital property, a Resident Holder (defined below) typically would be entitled to a foreign tax credit in respect of any withholding taxes applicable to dividends or other distributions received on such securities. If exposure to a U.S. Equity Investment instead is obtained through an investment in the Debt Securities, a Resident Holder may not be entitled to a foreign tax credit for any United States withholding taxes which are required to be withheld from U.S. Partial Principal Repayments made to the Resident Holder given that such U.S. Partial Principal Repayments will not qualify as income from a United States source, and will not be entitled to a foreign tax credit for any reduction in calculating the U.S. Equity Distributions in respect of foreign withholding tax.

### *Investing in the Debt Securities is Different than Investing Directly in the Underlying Equity Securities and the Fixed Income Investments*

If an investor were to purchase Equity Investments and Fixed Income Investments directly in accordance with the Strategies, the investor may earn a different return than it would if it invested in the Debt Securities. In particular, the Note Program Amount and any applicable selling commissions would not apply to such direct investments. However, an investor purchasing the Underlying Equity Securities and Fixed Income Investments directly would likely incur transaction fees (such as commissions). In addition, the Strategies involve a monthly allocation of the Portfolios to Equity Investments, a combination of Equity Investments and Fixed Income Investments or Fixed Income Investments. An investor that wishes to replicate the Strategies by investing directly in the Equity Investments and Fixed Income Investments would be required to purchase and sell Equity Investments and Fixed Income Investments from time to time in accordance with the Strategies in the secondary market in order to replicate the Strategies.

Generally, the Debt Securities may only be purchased and sold through dealers and other firms that facilitate purchase and related settlement using the Fundserv network. However, there is no assurance that a secondary market for the Debt Securities will develop or be sustained. See “Secondary Market”. In contrast, the Underlying Equity Securities are traded on an Exchange (defined in the product supplement) and, as such, may be more liquid than the Debt Securities.

Holders of the Debt Securities do not have an ownership interest or other interest in the assets in the Portfolios. See “Equity Investments” and “Fixed Income Investments”.

In addition, the tax implications associated with holding the Debt Securities as compared to holding the Equity Investments and Fixed Income Investments directly would be different. See “- Tax Treatment Different from Investing in Underlying Equity Securities” above.

*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. In addition, the initial estimated value of the Debt Securities does not take into account the ongoing fees and expenses applicable during the term of the Debt Securities, including the Ongoing Annual Amounts, or any Canadian foreign tax credits or deductions which may be available to the Bank in respect of foreign withholding taxes which may apply to dividends and other distributions received by the Bank if the Bank were to hedge its obligations under the Debt Securities by acquiring the Underlying Equity Securities. If you attempt to sell the Debt Securities prior to maturity, their market value may be lower than the initial estimated value and price you paid for them. This is due to, among other things, changes in the prices of the Equity Investments and the Fixed Income Investments, the selling commissions and the Note Program Amount. 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.

**Preparation of Initial Estimated Value:**

The initial estimated value of the Debt Securities was calculated by deducting the upfront portion of the Note Program Amount and the selling commissions payable to the Dealers from the Principal Amount. The initial estimated value of the Debt Securities does not take into account the ongoing fees and expenses applicable during the term of the Debt Securities, including the Ongoing Annual Amounts, or any Canadian foreign tax credits or deductions which may be available to the Bank in respect of foreign withholding taxes which may apply to dividends and other distributions received by the Bank if the Bank were to hedge its obligations under the Debt Securities by acquiring the Underlying Equity Securities. The difference between the Principal Amount and the sum of the upfront portion of the Note Program Amount and the selling commissions payable to the Dealers will be notionally invested in the Portfolios on the Issue Date. See “Portfolio” above. The Note Program Amount is an amount retained by the Bank to compensate it for creating and issuing the Debt Securities, maintaining the Strategies, the Models and the Portfolios, allowing for profit (which may or may not be realized) and costs relating to the Debt Securities (which may or may not include any costs of hedging



its obligations thereunder). The deduction of the upfront portion of the Note Program Amount and the selling commissions from the Principal Amount results in the initial estimated value of the Debt Securities on the Issue Date being 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 component embedded in such 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 that provides a return based on a set of quantitative factors as opposed to broad index based returns or single stock returns, with the ability to allocate to fixed income investments, in whole or in part, based on the trends of the stocks in the Indices selected by the Models
- investors who believe that the Strategies will protect them from market volatility by allocating the Portfolios, in whole or in part, to Fixed Income Investments based on the trends of the stocks in the Indices selected by the Models
- investors seeking an investment product with potential exposure (subject to allocations of the Portfolios to Fixed Income Investments as required by the Strategies) to the small to large-cap segments of the Canadian and United States equity markets, provided that High Risk Country Stocks in the U.S. Index will be excluded from the Portfolios
- 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 an enhanced return over fixed rate investments and who are prepared to assume the risks associated with an investment that may be partly or wholly linked to the performance of a portfolio of Underlying Equity Securities determined by the Models
- 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
- investors seeking the possibility of receiving all or part of their capital over the term of the Debt Securities as a return of capital
- investors looking for an investment product with the U.S. Portfolio composed of U.S. Underlying Equity Securities and/or U.S. Bonds, as the case may be, denominated in United States dollars and who are prepared to assume the risk (other than the risk associated with a portion of any fluctuations in currency between the beginning and the end of each calendar quarter during the term of the Debt Securities, which will be hedged by the partial currency hedge) that the CAD/USD Foreign Exchange Rate may negatively affect their return

**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”, any Partial Principal Repayments 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 closing 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. 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.

Information regarding the Portfolios 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 720 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)
1-180 days	4.30%
181-270 days	3.30%
271-360 days	2.55%
361-450 days	1.80%
451-540 days	1.20%
541-630 days	0.80%
631-720 days	0.40%
Thereafter	0.00%

**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. In generating rankings of stocks and maintaining the Portfolios and the Models, the Calculation Agent may rely solely on the data provided and calculations and determinations made by a third party provider (the “**Platform Provider**”). The Calculation Agent will, at its sole discretion but acting in good faith, choose a Platform Provider, which must be a well-recognized, reputable service provider in the applicable markets in respect of which such data, calculation and determinations are required to be made. The stocks eligible for inclusion in the Equity Investments may be limited to the stock universe maintained by a Platform Provider. Such stock universe will be subject to the criteria and methodology used by the Platform Provider to determine the constituents of that stock universe, which may change from time to time.

**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 until maturity is herein referred to as a “**Resident Holder**”. Any Partial Principal Repayments received in respect of the Debt Securities should not be included in the Resident Holder’s income when received, but rather should reduce the Resident Holder’s adjusted cost base of the Debt

Securities. However, a Resident Holder will be required to include in income, on a transfer of a Debt Security, the excess, if any, of the price for which it was so transferred by the Resident Holder over its outstanding principal amount at the time of the transfer. Furthermore, a Resident Holder will be required to include in computing income for the taxation year in which the Maturity Date (or earlier repayment in full) occurs the amount, if any, by which the amount payable at maturity (or earlier repayment in full) exceeds the Outstanding Principal Amount of the Debt Securities, except to the extent that such amount has been previously included in the income of the Resident Holder. If the Resident Holder receives an amount less than the adjusted cost base of the Debt Securities, the Resident Holder will realize a capital loss equal to the shortfall. See “Certain Canadian Tax Considerations” in Appendix B. Subject Payments may also be subject to United States withholding taxes. See “Certain United States Federal Income Tax Considerations” in Appendix B. **Potential purchasers of Debt Securities should consult with their own tax advisors having regard to their particular circumstances.**

The tax treatment resulting from exposure to the Portfolios through an investment in the Debt Securities is different than, and may be either advantageous or disadvantageous relative to, the tax treatment resulting from exposure to the Portfolios through a direct holding of the Underlying Equity Securities in the Portfolios. See “Risk Factors”.

**Past Performance of North American TAQ Securities Generally and Additional Information:**

See Appendix D “Past Performance of North American TAQ Securities Generally and Additional Information” for past performance of RBC North American Technical & Quantitative RoC Securities (“**North American TAQ Securities**”) generally and additional information on North American TAQ Securities.

**APPENDIX A**  
**SUMMARY INFORMATION REGARDING THE MODELS**

The following is a summary description of the Models based on information obtained from the Calculation Agent, available at [www.rbcnotes.com](http://www.rbcnotes.com).

The Models are designed to provide an objective measure of the performance potential of equity securities, including dividends and other distributions. The investment strategies, based on the rankings and selections generated by the Canadian Model and the U.S. Model, were each initially implemented on December 31, 2015. The Models use the latest trailing Price to Earnings, trailing Reinvestment Rates, “Earnings Surprise”, 3-Month Estimate Revisions, 3-Month Price Change and 5-Year Beta to rank the stocks of issuers in the S&P/TSX Composite Index and the S&P 1500<sup>®</sup> Composite Index to construct two notional portfolios each individually consisting of the stocks of no more than the top 20 ranked issuers. The inclusion of any stock in the U.S. Portfolio is subject to the restrictions that High Risk Country Stocks will not be notionally included in the U.S. Equity Investment and that the Bank may limit notional holdings of the stocks of real estate investment trusts in the S&P 1500<sup>®</sup> Composite Index such that (a) after a notice by the Bank to the Calculation Agent which so specifies, no more than 5% of the Value of the U.S. Portfolio shall consist of stocks of real estate investment trusts and (b) no stock of a real estate investment trust shall be included in the U.S. Portfolio after any notice by the Bank to the Calculation Agent that, if it were to hedge its obligations under the Debt Securities, such inclusion could result in the Bank becoming subject to United States withholding tax on certain dividends received by it on, or gain realized with respect to, stock of such real estate investment trust (including an interest in such stock held through a derivative) as a result of such hedging. Except with respect to High Risk Country Stocks, the Models do not rely on subjective judgment, and the strategy and process in the Models are applied consistently through time. Each month, each Model ranks the stocks of issuers in the applicable Index, as calculated at the end of the most recent calendar month, based on the following six valuation parameters:

- **Price to Earnings:** calculated using the current share price for the shares of an issuer divided by the latest four quarter trailing recurring earnings for that issuer. Price to Earnings is measured as a ratio, and a low Price to Earnings ratio is considered better than a high Price to Earnings ratio.
- **Reinvestment Rate:** measures an issuer’s recurring earnings over the four most recently completed fiscal quarters net of dividends that were paid to shareholders, divided by the most recent book value of the issuer and expressed as a percentage. A high Reinvestment Rate is considered better than a low Reinvestment Rate.
- **“Earnings Surprise”:** calculated as the percentage difference between an issuer’s most recent reported quarterly recurring earnings and the estimated Consensus Earnings Estimate for the same period. “Earnings Surprise” is expressed as a percentage difference, and a high “Earnings Surprise” is more favourable than a low or negative “Earnings Surprise”. **“Consensus Earnings Estimate”** means the average of the earnings estimates of each analyst that covers an Underlying Equity Security as reported by Bloomberg Finance L.P. (“**Bloomberg**”) (or such other service as may replace Bloomberg for the purpose of displaying consensus earnings estimates).
- **3-Month Estimate Revisions:** calculated as the percentage difference between the most recent current year Consensus Earnings Estimate for a company and the Consensus Earnings Estimate at the date three months prior. Estimate Revisions is expressed as a percentage change, and high and positive Estimate Revisions are better than low and negative Estimate Revisions.
- **3-Month Price Change:** calculated as the percentage change in an issuer’s price per share over the previous three months. 3-Month Price Change is expressed as a percentage, and higher values are favoured over lower values.
- **5-Year Beta:** calculated using regression analysis as the value, expressed as a ratio, of the monthly price change of a share regressed against the corresponding changes of the applicable Index level over the past five years. 5-Year Beta reflects the tendency of a share’s price to respond to changes in the applicable Index. A 5-Year Beta of 1 indicates that for a 1% increase (or decrease) in the Index, the share’s price will increase (or decrease) by 1%. A 5-Year Beta of less than 1 means that the share’s price will move less than the applicable Index and may be less volatile than the applicable Index level. A 5-Year Beta of greater than 1 indicates that the share’s price will move more than the applicable Index and may be more volatile than the applicable Index level. For example, if a share’s 5-Year Beta is 1.2, it is theoretically 20% more volatile than the applicable Index.

Once ranked by the Models, the stocks of the top 20 issuers are then vetted to remove those stocks that do not meet the Eligibility Criteria, as set out in the “The Models” section. Only shares that meet the Eligibility Criteria will be eligible for notional purchase, unless such shares that do not meet the Eligibility Criteria are already notionally included in an Equity Investment at the time of such purchase.

Where used herein, reference to “stocks” or “shares” of an Underlying Equity Security Issuer are references to the common shares of such Underlying Equity Security Issuer.

## APPENDIX B

### 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, is an individual (other than a trust) resident in Canada, deals at arm's length with and is not affiliated with the Bank, and 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.

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 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 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 Resident Holder will neither undertake nor arrange a transaction in respect of the Debt Securities primarily for the purpose of obtaining a tax benefit and 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 Resident 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.**

As noted, this summary is addressed only to Resident Holders. Purchasers of Debt Securities who are not resident in Canada are urged to consult with their tax advisors.

The tax treatment resulting from exposure to an Equity Investment through an investment in the Debt Securities is different than, and may be either advantageous or disadvantageous relative to, the tax treatment resulting from exposure to the Equity Investment through a direct holding of the Underlying Equity Securities in the Equity Investment. See "Risk Factors".

#### **Partial Principal Repayments**

Any Partial Principal Repayments received in respect of the Debt Securities (before taking into account any withholding tax exigible on U.S. Partial Principal Repayments) prior to their maturity (or repayment in full) should not be included in the Resident Holder's income when received, but rather should reduce the Resident Holder's adjusted cost base of the Debt Securities.

#### **Holding Debt Securities**

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, counsel understands that CRA's current administrative practice is not to require any 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 the Maturity Date (or throughout the portion of a taxation year ending with earlier repayment in full) the return on the Debt Securities generally will not be determinable. Where this is the case, on the basis of such understanding of 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 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 such date.

The terms of the Debt Securities provide that if in any calendar quarter the cumulative total of Partial Principal Repayments otherwise payable in that and all previous calendar quarters would exceed \$99.00 per Debt Security, then Pre-Maturity Interest generally will commence to accrue on the Outstanding Principal Amount of each such Debt Security. Any amount received or receivable by a Resident Holder (depending on the method regularly followed by the Resident Holder in computing income under the Tax Act) in a taxation year as, on account of, in lieu of payment of or in satisfaction of, interest will be required to be included in 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.

### **Foreign Tax Credit or Deduction**

A Resident Holder may not be entitled to a foreign tax credit in respect of any United States withholding taxes which are required to be withheld from U.S. Partial Principal Repayments made to the Resident Holder given that such U.S. Partial Principal Repayments will not qualify as income from a United States source. Where such withholding taxes are paid on a U.S. Partial Principal Repayment, they may not qualify as being in respect of income of the Resident Holder for that year from the Debt Securities and thus may not be eligible for deduction in computing income. A Resident Holder also may not be entitled to a foreign tax credit, or deduction from income, if the holder is subject to United States withholding tax on the proceeds of sale by the holder of a Debt Security. The rules in respect of any such credit or deduction are complex and their application may vary depending on a Resident Holder's individual circumstances. A Resident Holder should consult a tax advisor before claiming any such credit or deduction, or a foreign tax credit or deduction in respect of any withholding taxes on amounts paid under the Debt Securities as Pre-Maturity Interest or in respect of the portion of the Redemption Amount attributable to the Final Distribution Amount or in respect of any United States taxes to which the proceeds of sale of a Debt Security are subject.

In addition, a Resident Holder will not be entitled to a foreign tax credit or deduction from income for any reductions made in respect of foreign withholding taxes in calculating the amount of U.S. Equity Distributions.

Furthermore, a Resident Holder also will not be entitled to a foreign tax credit or a deduction in computing income in respect of any United States withholding taxes which are withheld from U.S. Partial Principal Repayments, Pre-Maturity Interest, or in respect of any United States taxes which are withheld from the proceeds of sale of a Debt Security, or in respect of the portion of the Redemption Amount attributable to the Final Distribution Amount in amounts in excess of the rate of withholding required under the taxation laws of the U.S. (which is anticipated will occur to the extent that such payments are made by reference to U.S. Equity Distributions of Non-U.S. Issuers).

### **Payment at Maturity or Earlier Repayment in Full**

A Resident Holder who holds the Debt Securities until maturity (or earlier repayment in full by the Bank) will be required to include in computing the Resident Holder's income for the taxation year in which the Maturity Date (or repayment in full) occurs the amount, if any, by which the amount payable at maturity (or repayment in full) exceeds the Outstanding Principal Amount of the Debt Securities at that time. Alternatively, the Resident Holder will realize a capital loss to the extent that the amount received at maturity (or repayment in full) is less than the Resident Holder's adjusted cost base of such Debt Securities (which generally should be equal to the cost of the Debt Securities to the Resident Holder less the total amount of the Partial Principal Repayments (before withholding taxes) previously received by the Resident Holder). The income tax considerations associated with the realization of a capital loss are described below.

### **Disposition of Debt Securities**

Changes in the Underlying Equity Securities comprising the Portfolios or changes in the Portfolios will not result in the disposition of a Debt Security by a Resident Holder.

Where a Resident Holder disposes of a Debt Security (other than to the Bank on the Maturity Date or earlier 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 the Maturity Date or earlier 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 over its outstanding principal amount at the time of the transfer.

The Resident Holder should realize a capital loss 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 the Resident Holder's adjusted cost base of the Debt Securities (which generally should be equal to the cost of the Debt Securities to the Resident Holder less the total amount of the Partial Principal Repayments (before withholding taxes) previously received by the Resident Holder). As described above, any gain realized from the disposition of Debt Securities will be included in income and will not give rise to a capital gain. Resident Holders who dispose of Debt Securities prior to the Maturity Date (or earlier repayment in full) should consult their own tax advisors with respect to their particular circumstances.

### **Treatment of Capital Losses**

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.

### **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 ("TFSA"), 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 Debt 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. Debt 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.

Investors should also review the discussion of United States withholding taxes below under "Certain United States Federal Income Tax Considerations".

### **Certain United States Federal Income Tax Considerations**

*The following is a general description of certain United States tax considerations relating to the Debt Securities. It does not purport to be a complete analysis of all tax considerations relating to the Debt Securities. Prospective purchasers of the Debt Securities should consult their tax advisors as to the consequences under the tax laws of the country of which they are resident for tax purposes and the tax laws of the United States of acquiring, holding and disposing of the Debt Securities and receiving payments under the Debt Securities. Except as otherwise specifically noted, this summary is based upon the law as in effect on the date of this pricing supplement and is subject to any change in law that may take effect after such date.*

A "dividend equivalent" payment is treated as a dividend from sources within the United States and such payments generally would be subject to a 30% United States withholding tax (or a lower rate under an applicable income tax treaty) if paid to a Non-United States Holder. A "Non-United States Holder" is a beneficial owner of a Debt Security that, for United States federal income tax purposes, is a non-resident alien individual, a foreign corporation, or a foreign estate or trust. Under United States Treasury Department regulations, payments (including deemed payments) with respect to equity-linked instruments ("ELIs") that are "specified ELIs" may be treated as dividend equivalents if such specified ELIs reference an interest in an "underlying security," which is generally any interest in an entity taxable as a corporation for U.S. federal income tax purposes if a payment with respect to such interest could give rise to a U.S. source dividend. Withholding for a dividend equivalent payment is not required until the later of when (a) the amount of a dividend equivalent is determined and (b) a payment occurs. The amount of a dividend equivalent is determined on the earlier of the date that is the record date of the dividend and the day prior to the ex-dividend date with respect to the dividend. A payment generally occurs when (a) money or other property is paid to or by the long party, (b) in the case of dividends for certain baskets referencing more than 25 underlying securities, a payment is treated as being made at the end of the applicable calendar quarter, or (c) the long party sells, exchanges, transfers, or otherwise disposes of the transaction (including by settlement, offset, termination, expiration, lapse, or maturity). There is an exception, however, for when a long party pays a premium or other upfront payment to the short party at the time of issuance. Upon a sale of the Debt Security, a Non-United States Holder is deemed to receive any dividend equivalent amount that has accrued on the Debt Security up until the date of sale. The IRS has issued guidance that states that the United States Treasury Department and the IRS intend to amend the effective dates of the United States Treasury Department regulations to provide that withholding on dividend equivalent payments will not apply to specified ELIs that are not delta-one instruments and that are issued before January 1, 2019. Based on market information as of the date of this pricing supplement, the Bank expects that the delta of the Debt Security with respect to the U.S. Underlying Equity Securities will be one, and therefore, payments on the Debt Securities with respect to the Underlying Equity Securities may be dividend equivalents

subject to withholding. If any payments are treated as dividend payments subject to withholding, the Bank (or the applicable paying agent) will withhold taxes (subject to reduction under the Treaty (as defined below)) without being required to pay to Non-United States Holders any additional amounts with respect to amounts so withheld. Further, Non-United States Holders may be required to provide certifications prior to, or upon the sale or maturity of the Debt Securities in order to minimize or avoid United States withholding taxes. Pursuant to the convention between the Government of the United States of America and Canada with respect to taxes on income and on capital signed September 26, 1980, as amended (the “**Treaty**”), dividends derived by a trust, company, organization or other arrangement operated exclusively to administer or provide pension, retirement, or employee benefits that qualifies as a resident of Canada under the Treaty (including certain RRSPs, RRIFs and DPSPs) should generally be exempt from United States taxation. Other persons qualified as residents of Canada under the Treaty may generally be entitled to a 15% rather than 30% withholding tax rate on dividend equivalent payments. To claim benefits under an income tax treaty, a Non-United States Holder must certify as to its eligibility under the appropriate treaty’s limitations on benefits article, if applicable (which certification may generally be made on an Internal Revenue Service Form W-8BEN or W-8BEN-E, or a substitute or successor form).

The dividend equivalent rules discussed above may also apply to payments received under hedging arrangements. An amount equal to any U.S. Equity Distributions will be paid to holders as a U.S. Partial Principal Repayment on the Debt Securities (or, in certain circumstances, will be payable as Pre-Maturity Interest or included in the Variable Return) based on the amount per Debt Security notionally invested therein on a quarterly basis. If and to the extent that United States withholding taxes would become payable in respect of dividend equivalent payments made to a taxable holder who is a resident of Canada for purposes of, and is entitled to claim the benefit of, the Treaty (the “**Reference Holder**”) on a hedging instrument in respect of listed shares of U.S. public companies (the “**Reference Hedge**”), the U.S. Partial Principal Repayments, any amounts payable as Pre-Maturity Interest and the portion of the Redemption Amount attributable to U.S. Equity Distributions will be reduced by such rate of United States withholding. As the amount of such payments referable to notional distributions payable on U.S. Underlying Equity Securities of Non-U.S. Issuers generally will have been reduced by the Calculation Agent by reference to withholding taxes applicable in jurisdictions outside Canada at a rate typically of 15%, such payments respecting Non-U.S. Issuers generally would be subject to a double reduction for both United States and non-United States withholding taxes. In particular, the amount of any U.S. Equity Distributions would generally be reduced by a percentage equal to the rate of United States withholding tax (currently 15%) that would be payable in respect of payments to the Reference Holder under the Reference Hedge (with a corresponding reduction in the amount of the Variable Return). The reduced amount will be converted into Canadian dollars at the applicable CAD/USD Foreign Exchange Rate to determine the U.S. Partial Principal Repayment, Pre-Maturity Interest or the portion of the Final Distribution Amount attributable to U.S. Equity Distributions, as the case may be. For purposes of this calculation, in determining the attributes of the Reference Hedge, the Calculation Agent shall, in its judgment, acting reasonably, seek to minimize adverse tax consequences to the Reference Holder. Although the Bank does not anticipate payments under the Reference Hedge to be subject to United States withholding tax, the U.S. Partial Principal Repayments, the Pre-Maturity Interest payments (if any) or the portion of the Final Distribution Amount that is attributable to U.S. Equity Distributions would be reduced if payments under the Reference Hedge were determined to be subject to United States withholding tax. See the discussion under “Partial Principal Repayments” commencing on page 16 of this pricing supplement for additional information.



## APPENDIX C

### Net Value of the U.S. Portfolio Calculation Examples

References in this Appendix C to “CAD” or “\$” are to Canadian currency and references to “USD” and “US\$” are to United States currency.

The examples set out below are included for illustration purposes only. The Net Values of the U.S. Portfolio, Settlement Amounts and exchange rates used to illustrate the adjustments to the Net Values of the U.S. Portfolio resulting from the application of the Currency Forward are not estimates or forecasts of the Net Values of the U.S. Portfolio, Settlement Amounts or exchange rates on which the adjustments of Net Value of the U.S. Portfolio resulting from the application of the Currency Forward will depend. In all four examples, it is assumed that the Net Value of the U.S. Portfolio at the end of the previous quarter is \$10,000. As can be seen from these examples, the Settlement Amount notionally received or paid under the Currency Forward differs somewhat from the foreign exchange gain or loss on the U.S. Portfolio, thereby illustrating that the Currency Forward is only a partial hedge. Further, since the Currency Forward provides partial currency risk protection only with respect to the U.S. Portfolio, the examples below illustrate its effect solely on the Net Value of the U.S. Portfolio, notwithstanding the Currency Forward will also affect the Net Value of the Portfolios.

**Example #1 – Increase in Net Value of the U.S. Portfolio and Depreciation of U.S. Currency.** In this example, the notional settlement of the Currency Forward results in the addition of a positive Settlement Amount to the Net Value of the U.S. Portfolio as a result of the depreciation of the U.S. currency.

#### **Assumptions**

- (a) CAD/USD Foreign Exchange Rate at end of previous quarter: \$1.00 = US\$0.940
- (b) CAD/USD Foreign Exchange Rate at end of current quarter: \$1.00 = US\$0.965
- (c) Currency Forward exchange rate for current quarter: \$1.00 = US\$0.935
- (d) Net Value of the U.S. Portfolio at end of previous quarter: \$10,000 = US\$9,400 (i.e.  $\$10,000 \times 0.940$ )
- (e) U.S. dollar equivalent Net Value of the U.S. Portfolio at end of the current quarter prior to addition of the Settlement Amount: US\$9,800

#### **Calculation of the Net Value of the U.S. Portfolio**

- (a) Net Value of the U.S. Portfolio at end of the current quarter, prior to addition of the Settlement Amount:  
$$\text{US\$9,800} / 0.965 = \$10,155.44$$
- (b) Settlement Amount, based on the difference between the Currency Forward exchange rate and the CAD/USD Foreign Exchange Rate at end of the current quarter:  
$$\text{US\$9,400} / 0.935 - \text{US\$9,400} / 0.965 = \$312.54$$
- (c) Net Value of the U.S. Portfolio after addition of the positive Settlement Amount:  
$$\$10,155.44 + \$312.54 = \$10,467.98$$

#### **Impact of Partial Currency Hedge**

- (a) Net Value of the U.S. Portfolio at end of the current quarter, if the exchange rate remained unchanged during the quarter, calculated to demonstrate the foreign exchange loss prior to adjustment for Currency Forward:  
$$\text{US\$9,800} / 0.940 = \$10,425.53$$
- (b) Foreign exchange loss on U.S. Portfolio prior to adjustment for Currency Forward above:  
$$\$10,425.53 - \$10,155.44 = \$270.09$$

**Example #2 – Increase in Net Value of the U.S. Portfolio and Appreciation of U.S. Currency.** In this example, the notional settlement of the Currency Forward results in the addition of a negative Settlement Amount to the Net Value of the U.S. Portfolio as a result of the appreciation of the U.S. currency.

#### **Assumptions**

- (a) CAD/USD Foreign Exchange Rate at end of previous quarter: \$1.00 = US\$0.940
- (b) CAD/USD Foreign Exchange Rate at end of current quarter: \$1.00 = US\$0.920
- (c) Currency Forward exchange rate for current quarter: \$1.00 = US\$0.935

- (d) Net Value of the U.S. Portfolio at end of previous quarter:  $\$10,000 = \text{US}\$9,400$  (i.e.  $\$10,000 \times 0.940$ )
- (e) U.S. dollar equivalent Net Value of the U.S. Portfolio at end of the current quarter prior to addition of the Settlement Amount:  $\text{US}\$9,800$

**Calculation of the Net Value of the U.S. Portfolio**

- (a) Net Value of the U.S. Portfolio at end of the current quarter, prior to addition of the Settlement Amount:  

$$\text{US}\$9,800 / 0.920 = \$10,652.17$$
- (b) Settlement Amount, based on the difference between the Currency Forward exchange rate and the CAD/USD Foreign Exchange Rate at end of the current quarter:  

$$\text{US}\$9,400 / 0.935 - \text{US}\$9,400 / 0.920 = -\$163.92$$
- (c) Net Value of the U.S. Portfolio after addition of the negative Settlement Amount:  

$$\$10,652.17 + (-\$163.92) = \$10,488.25$$

**Impact of Partial Currency Hedge**

- (a) Net Value of the U.S. Portfolio at end of the current quarter, if the exchange rate remained unchanged during the quarter, calculated to demonstrate the foreign exchange gain prior to adjustment for Currency Forward:  

$$\text{US}\$9,800 / 0.940 = \$10,425.53$$
- (b) Foreign exchange gain on U.S. Portfolio prior to adjustment for Currency Forward above:  

$$\$10,652.17 - \$10,425.53 = \$226.64$$

**Example #3 – Decrease in Net Value of the U.S. Portfolio and Depreciation of U.S. Currency.** In this example, the notional settlement of the Currency Forward results in the addition of a positive Settlement Amount to the Net Value of the U.S. Portfolio as a result of the depreciation of the U.S. currency.

**Assumptions**

- (a) CAD/USD Foreign Exchange Rate at end of previous quarter:  $\$1.00 = \text{US}\$0.940$
- (b) CAD/USD Foreign Exchange Rate at end of current quarter:  $\$1.00 = \text{US}\$0.965$
- (c) Currency Forward exchange rate for current quarter:  $\$1.00 = \text{US}\$0.935$
- (d) Net Value of the U.S. Portfolio at end of previous quarter:  $\$10,000 = \text{US}\$9,400$  (i.e.  $\$10,000 \times 0.940$ )
- (e) U.S. dollar equivalent Net Value of the U.S. Portfolio at end of the current quarter prior to addition of the Settlement Amount:  $\text{US}\$9,000$

**Calculation of the Net Value of the U.S. Portfolio**

- (a) Net Value of the U.S. Portfolio at end of the current quarter, prior to addition of the Settlement Amount:  

$$\text{US}\$9,000 / 0.965 = \$9,326.42$$
- (b) Settlement Amount, based on the difference between the Currency Forward exchange rate and the CAD/USD Foreign Exchange Rate at end of the current quarter:  

$$\text{US}\$9,400 / 0.935 - \text{US}\$9,400 / 0.965 = \$312.54$$
- (c) Net Value of the U.S. Portfolio after addition of the positive Settlement Amount:  

$$\$9,326.42 + \$312.54 = \$9,638.96$$

**Impact of Partial Currency Hedge**

- (a) Net Value of the U.S. Portfolio at end of the current quarter, if the exchange rate remained unchanged during the quarter, calculated to demonstrate the foreign exchange loss prior to adjustment for Currency Forward:  

$$\text{US}\$9,000 / 0.940 = \$9,574.47$$
- (b) Foreign exchange loss on U.S. Portfolio prior to adjustment for Currency Forward above:

$$\$9,574.47 - \$9,326.42 = \$248.05$$

**Example #4 – Decrease in Net Value of the U.S. Portfolio and Appreciation of U.S. Currency.** In this example, the notional settlement of the Currency Forward results in the addition of a negative Settlement Amount to the Net Value of the U.S. Portfolio as a result of the appreciation of the U.S. currency.

#### **Assumptions**

- (a) CAD/USD Foreign Exchange Rate at end of previous quarter: \$1.00 = US\$0.940
- (b) CAD/USD Foreign Exchange Rate at end of current quarter: \$1.00 = US\$0.920
- (c) Currency Forward exchange rate for current quarter: \$1.00 = US\$0.935
- (d) Net Value of the U.S. Portfolio at end of previous quarter: \$10,000 = US\$9,400 (i.e. \$10,000\*0.940)
- (e) U.S. dollar equivalent Net Value of the U.S. Portfolio at end of the current quarter prior to addition of the Settlement Amount: US\$9,000

#### **Calculation of the Net Value of the U.S. Portfolio**

- (a) Net Value of the U.S. Portfolio at end of the current quarter, prior to addition of the Settlement Amount:  

$$\text{US\$}9,000 / 0.920 = \$9,782.61$$
- (b) Settlement Amount, based on the difference between the Currency Forward exchange rate and the CAD/USD Foreign Exchange Rate at end of the current quarter:  

$$\text{US\$}9,400 / 0.935 - \text{US\$}9,400 / 0.920 = -\$163.92$$
- (c) Net Value of the U.S. Portfolio after addition of the negative Settlement Amount:  

$$\$9,782.61 + (-\$163.92) = \$9,618.69$$

#### **Impact of Partial Currency Hedge**

- (a) Net Value of the U.S. Portfolio at end of the current quarter, if the exchange rate remained unchanged during the quarter, calculated to demonstrate the foreign exchange gain prior to adjustment for Currency Forward:  

$$\text{US\$}9,000 / 0.940 = \$9,574.47$$
- (b) Foreign exchange gain on U.S. Portfolio prior to adjustment for Currency Forward above:  

$$\$9,782.61 - \$9,574.47 = \$208.14$$

## APPENDIX D

### Past Performance of North American TAQ Securities Generally and Additional Information

As of April 30, 2018, in the aggregate the Portfolios were allocated 100% to Equity Investments. The chart below indicates the Equity Investment for the month of May 2018. The pie charts below indicate the industry and country allocations, respectively, of the Equity Investment for the same period.

#### Equity Investment – May 2018

Sector	Index	Symbol	Company	Weight	Dividend Yield (%)	Rank
Energy	S&P/TSX	ERF	Enerplus Corp	2.58%	0.81	73
Materials	S&P/TSX	CFP	Canfor Corp	2.48%	0.00	1
	S&P/TSX	OSB	Norbord Inc	2.57%	4.53	3
	S&P/TSX	WFT	West Fraser Timber Co Ltd	2.46%	0.69	5
	S&P/TSX	CCL.B	CCL Industries Inc	2.38%	0.83	21
	S&P/TSX	MX	Methanex Corp	2.46%	2.18	24
	S&P/TSX	IFP	Interfor Corp	2.49%	0.00	27
	S&P 1500	LPX	Louisiana-Pacific Corp	1.88%	1.84	16
Industrials	S&P/TSX	TFII	TFI International Inc	2.42%	2.26	2
	S&P/TSX	AC	Air Canada	2.29%	0.00	4
	S&P/TSX	RBA	Ritchie Bros Auctioneers Inc	2.56%	2.03	20
	S&P/TSX	NFI	New Flyer Industries Inc	2.50%	2.20	22
	S&P/TSX	WSP	WSP Global Inc	2.71%	2.36	87
	S&P 1500	NSP	Insperty Inc	2.18%	1.00	3
	S&P 1500	FCN	FTI Consulting Inc	3.00%	0.00	6
	S&P 1500	FLR	Fluor Corp	2.37%	1.42	52
	S&P 1500	ALGT	Allegiant Travel Co	2.33%	1.75	80
	S&P 1500	GWV	WW Grainger Inc	2.51%	1.93	86
	S&P 1500	KELVA	Kelly Services Inc	2.57%	1.03	107
Consumer Discretionary	S&P/TSX	MG	Magna International Inc	2.58%	2.25	34
	S&P/TSX	QBR.B	Quebecor Inc	2.33%	0.46	37
	S&P 1500	DIN	Dine Brands Global Inc	2.84%	3.18	2
	S&P 1500	MOV	Movado Group Inc	2.56%	2.03	4
	S&P 1500	KORS	Michael Kors Holdings Ltd	2.51%	0.00	7
	S&P 1500	APEI	American Public Education Inc	2.32%	0.00	9
	S&P 1500	DDS	Dillard's Inc	2.32%	0.54	17
	S&P 1500	FOSL	Fossil Group Inc	2.78%	0.00	21
	S&P 1500	DECK	Deckers Outdoor Corp	2.62%	0.00	22
	S&P 1500	TLRD	Tailored Brands Inc	2.88%	2.28	23
	S&P 1500	URBN	Urban Outfitters Inc	2.65%	0.00	51
	S&P 1500	HIBB	Hibbett Sports Inc	2.75%	0.00	191
Consumer Staples	S&P/TSX	EMP.A	Empire Co Ltd	2.46%	1.69	14
Health Care	S&P 1500	THC	Tenet Healthcare Corp	2.18%	0.00	1
Information Technology	S&P/TSX	CSU	Constellation Software Inc/Canada	2.65%	0.56	10
	S&P/TSX	OTEX	Open Text Corp	2.60%	1.50	13
	S&P/TSX	ENGH	Enghouse Systems Ltd	2.45%	1.08	80
	S&P 1500	MU	Micron Technology Inc	2.35%	0.00	45
	S&P 1500	STX	Seagate Technology PLC	2.40%	4.35	167
Real Estate	S&P/TSX	CIGI	Colliers International Group Inc	2.57%	0.14	7
	S&P/TSX	DRG.UN	Dream Global Real Estate Investment Trust	2.43%	5.84	23

#### U.S. Portfolio Deletions

HCA	HCA Healthcare Inc	US\$96.73
SKX	Skechers U.S.A. Inc	US\$28.28

#### U.S. Portfolio Additions

NSP	Insperty Inc	US\$82.95
THC	Tenet Healthcare Corp	US\$30.73

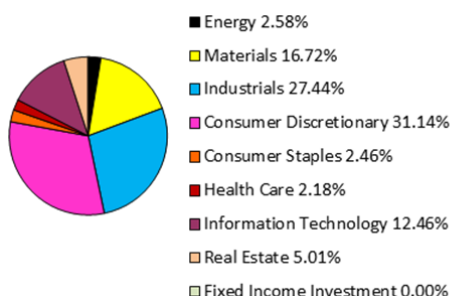
#### Canadian Portfolio Deletions

TECK.B	Teck Resources Ltd	\$32.79
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#### Canadian Portfolio Additions

TFII	TFI International Inc	\$36.94
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## Industry Allocation



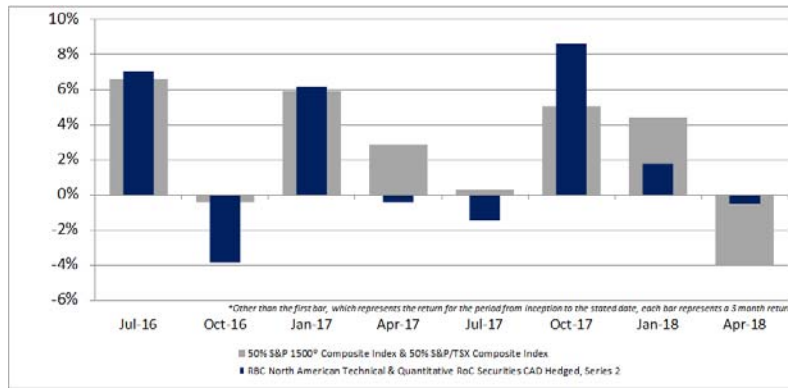
## Allocation by Country



## Historical Information

The following historical secondary market price chart reflects the historical closing secondary market price of RBC North American Technical & Quantitative RoC Securities CAD Hedged, Series 2 (the “**Series 2**”) for each day such secondary market was open for trading and an amalgamation of the percentage change of the levels of the S&P 1500<sup>®</sup> Composite Index (50%) and the S&P/TSX Composite Index (50%) since the issue date of Series 2 on May 5, 2016. The Series 2 is the initial public implementation of the North American TAQ Securities strategy. The closing secondary market price of Series 2 on its issue date was \$100.00. For Series 2, on its issue date, an amount equal to \$48.93 per debt security was notionally invested in the Canadian portfolio and an amount equal to \$48.92 per debt security was notionally invested in the U.S. portfolio. The secondary market price at any particular time is the price at which a holder of North American TAQ Securities could dispose of such securities. The secondary market price may not be the same as, and may be substantially different from the NAV per debt security. The NAV per debt security between different series of North American TAQ Securities may differ for various reasons including as a result of different levels of note program amounts, applicable early trading charges and the issue date for a particular series. The difference in NAV per debt security between the debt securities for different series of North American TAQ Securities could result in different secondary market prices for debt securities of different series of North American TAQ Securities. The historical secondary market price for North American TAQ Securities which are not Series 2 may differ from the historical secondary market price for Series 2 because the different note program amounts for the different series of North American TAQ Securities may affect the secondary market price of such securities. A series of North American TAQ Securities with a note program amount which is higher than the note program amount for Series 2 would likely have a lower secondary market price than the secondary market price for Series 2. **Prior historical secondary market prices of Series 2 are not necessarily indicative of any future secondary market price for Series 2 or other North American TAQ Securities.** There is no assurance that a secondary market for the Debt Securities will develop or be sustained.

### Historical Secondary Market Price<sup>1</sup>



Source: RBC Capital Markets Quantitative Research

Returns as of April 30, 2018	1 month	3 months	YTD	1 Year	Since Inception
RBC North American Technical & Quantitative RoC Securities CAD Hedged, Series 2	1.15%	-0.56%	-1.54%	8.27%	8.58%
50% S&P 1500® Composite Index & 50% S&P/TSX Composite Index	0.91%	-4.05%	-2.32%	5.50%	10.47%

<sup>1</sup>The secondary market price of the Debt Securities at any time will generally depend on, among other things, (a) how much the prices of the underlying interests have risen or fallen since the Issue Date; and (b) a number of other interrelated factors, including, without limitation, volatility in the prices of the underlying interests, the level of interest rates in the applicable markets, dividend yields on any of the securities, if any, comprising the underlying interest, the currency in which the series is denominated, any currency hedging and the Maturity Date. The relationship among these factors is complex and may also be influenced by various political, economic and other factors that can affect the trading price of a Debt Security.

The S&P 1500<sup>®</sup> Composite Index is a product of S&P Dow Jones Indices LLC or its affiliates (“SPDJ”) and the S&P/TSX Composite Index is a product of SPDJI or its affiliates and TSX Inc., and such indices have been licensed for use by the Bank. Standard & Poor’s<sup>®</sup> and S&P<sup>®</sup> are registered trademarks of Standard & Poor’s Financial Services LLC (“S&P”) and Dow Jones<sup>®</sup> is a registered trademark of Dow Jones Trademark Holdings LLC (“Dow Jones”). TSX is a registered trademark of TSX Inc. The trademarks have been licensed to SPDJI and have been sublicensed for use for certain purposes by the Bank. The Debt Securities are not sponsored, endorsed, sold or promoted by SPDJI, Dow Jones, S&P, any of their respective affiliates or TSX Inc. and none of such parties make any representation regarding the advisability of investing in such product(s) nor do they have any liability for any errors, omissions, or interruptions of the S&P 1500<sup>®</sup> Composite Index or S&P/TSX Composite Index.