# Pricing Supplement to Short Form Base Shelf Prospectus dated January 21, 2016, the Prospectus Supplement thereto dated January 22, 2016 and the Prospectus Supplement thereto dated January 22, 2016

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 21, 2016, the prospectus supplement dated January 22, 2016 and the prospectus supplement dated January 22, 2016, 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.

May 11, 2017



Royal Bank of Canada Senior Note Program Equity and Debt Linked Securities Maximum \$20,000,000 (200,000 Debt Securities) RBC TEAM RoC Yield Securities, Series 23 Due May 12, 2027 Non-Principal Protected Securities

Royal Bank of Canada (the "**Bank**") is offering up to \$20,000,000 of RBC TEAM (Tactical Equity Allocation Model) RoC Yield Securities, Series 23 (the "**Debt Securities**"), designed for investors seeking a return based on the Bank's proprietary multi-factor model referred to as the RBC 8-Factor Quantitative Model (the "**Model**"), described below, with the ability to allocate to fixed income investments based on the trend of the S&P/TSX Composite Index (the "**Index**"), where the Portfolio (defined below) is reallocated monthly.

The return of the Debt Securities will reflect the return over the term to maturity of the Debt Securities of a notional portfolio (the "**Portfolio**") allocated dynamically over the term of the Debt Securities between an Equity Investment (defined herein) and/or a Fixed Income Investment (defined herein), determined and reallocated on a monthly basis based on the Strategy (defined herein). An Equity Investment will be a notional portfolio composed of shares (the "**Underlying Equity Securities**" and each, an "**Underlying Equity Security**") of 25 ranked issuers (the "**Underlying Equity Security Issuers**" and each, an "**Underlying Equity Security Issuer**") resulting from the application of the Model. A Fixed Income Investment will be a notional five-year zero coupon bond (each, a "**Bond**") with a yield to maturity equal to the five-year Canadian dollar interbank swap rate on the date when the Fixed Income Investment was notionally made. The asset allocation of the Portfolio as between an Equity Investment and/or a Fixed Income Investment will be determined monthly.

The five-year Canadian dollar inter-bank zero coupon swap rate as of May 4, 2017 was approximately 0.954356%.

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 annual component of the Note Program Amount.** We describe our determination of the initial estimated value in more detail below. See "Risk Factors" and "Preparation of Initial Estimated Value".

The Debt Securities are 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 Model is designed to provide an objective measure of the performance potential of the equity securities, including dividends and other distributions. The Model uses the latest trailing quarterly earnings, consensus earnings estimates, book values and equity prices to rank the stocks of the largest 100 dividend paying companies in the Index (excluding income trusts and the Bank) to construct a notional portfolio of 25 stocks. The Model does not rely on subjective judgment, and the strategy and process are applied consistently and objectively through time. Each month, the Model will rank the 100 stocks that meet the criteria for inclusion, as calculated on the last Business Day (defined in the program supplement) of the most recently completed calendar quarter, based on eight valuation parameters:

- Price to Earnings
- Quarterly Earnings Growth
- "Earnings Surprise"
- 90-Day Price Change
- Price to Book Value
- Return on Equity
- Estimate Revisions
- 180-Day Price Change

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 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 Portfolio (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 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 amount of any dividends or other distributions, other than Extraordinary Distributions (defined herein), paid by the Underlying Equity Security Issuers on the Underlying Equity Securities notionally included in the Portfolio during the immediately preceding calendar quarter, to a maximum of \$99.00 per Debt Security over the term of the Debt Securities. In addition, any dividends or other distributions in excess of \$99.00 per Debt Security, other than Extraordinary Distributions, paid by the Underlying Equity Security Issuers on the Underlying Equity Security Issuers on the Underlying Equity Security other than Extraordinary Distributions, paid by the Underlying Equity Security Issuers on the Underlying Equity Securities notionally included in the Portfolio will be notionally reinvested in the Portfolio on the first Business Day of the next calendar quarter in accordance with the allocation of the Portfolio at the beginning of such calendar quarter. Extraordinary Distributions will be notionally reinvested in the Portfolio in accordance with the allocation of the Portfolio on the date of reinvestment. With respect to Extraordinary Distributions, the Calculation Agent (defined herein) will have discretion in determining the timing of such notional reinvestment. See "Extraordinary Distributions".

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

The Debt Securities are described in this pricing supplement delivered together with our short form base shelf prospectus dated January 21, 2016 (the "base shelf prospectus"), the prospectus supplement establishing our Senior Note Program dated January 22, 2016 (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 22, 2016 (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 Portfolio and investors have no rights with respect to the securities in the Portfolio. The Debt Securities are considered to be "specified derivatives" under applicable Canadian securities laws. If you purchase Debt Securities, you will be exposed to fluctuations in interest rates and changes in the Value of the Portfolio, 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		

<sup>(1)</sup> 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.

<sup>(2)</sup> 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 22, 2016, 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 template 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 May 9, 2017 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 template version of marketing materials filed with the securities commission or similar regulatory authority in each of the provinces and territories of Canada in connection with this offering after the date hereof but prior to the termination of the distribution of the Debt Securities under this pricing supplement (including any amendments to, or an amended version of, the marketing materials) is deemed to be incorporated by reference herein and in the base shelf prospectus solely for the purpose of our Senior Note Program and the Debt Securities issued hereunder. Any such marketing materials are not part of this pricing supplement or the base shelf prospectus to the extent that the contents of the marketing materials have been modified or superseded by a statement contained in an amendment to this pricing supplement.

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

From time to time, we make written or oral forward-looking statements within the meaning of certain securities laws, including the "safe harbour" provisions of the *United States Private Securities Litigation Reform Act of 1995* and any applicable Canadian securities legislation. We may make forward-looking statements in the base shelf prospectus and in the documents incorporated by reference therein, in the program supplement, in the product supplement, in this pricing supplement, in other filings with Canadian regulators or the United States Securities and Exchange Commission, in 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 and market review and outlook for Canadian, U.S., European and global economies, the regulatory environment in which we operate, the outlook and priorities for each of our business segments, and the risk environment including our liquidity and funding risk. 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 Risk management section of our management's discussion and analysis for the three-month period ended January 31, 2017 (the "Q1 2017 Management's Discussion and Analysis") and in the Risk management and Overview of other risks sections of our management's discussion and analysis for the year ended October 31, 2016 (the "2016 Management's Discussion and Analysis") incorporated by reference herein; global uncertainty, the Brexit vote to have the United Kingdom leave the European Union, weak oil and gas prices, cyber risk, anti-money laundering, exposure to more volatile sectors, technological innovation and new Fintech entrants, increasing complexity of regulation, data management, litigation and administrative penalties; 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 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 heading Outlook and priorities in our 2016 Management's Discussion and Analysis, as updated by the Overview and outlook section of the Q1 2017 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 management section of our Q1 2017 Management's Discussion and Analysis and in the Risk management and Overview of other risks sections of our 2016 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 TEAM RoC Yield Securities, Series 23 Due May 12, 2027
Issuer:	Royal Bank of Canada (the "Bank")
Dealers:	RBC Dominion Securities Inc. ("RBC DS") and Laurentian Bank Securities Inc.
	Laurentian Bank Securities Inc., a dealer to which we are neither related nor connected, participated in the due diligence activities performed by the Dealers in respect of the offering, but did not participate in the structuring and pricing of the offering. See "Plan of Distribution" in the program supplement.
Issue:	RBC TEAM (Tactical Equity Allocation Model) RoC Yield Securities, Series 23 due May 12, 2027.
FundSERV Code:	RBC4053
Issue Price:	The Debt Securities will be issued at a price equal to their Principal Amount (defined below).
Minimum Investment:	50 Debt Securities or \$5,000.
Denomination:	Debt Securities are issuable in denominations of \$100 (the " <b>Principal Amount</b> ") and in minimum increments of \$100.
Issue Date:	June 6, 2017 or such other date as may be agreed to by the Bank and the Dealers.
Initial Valuation Date:	June 1, 2017.
Issue Size:	The maximum issue size will be an aggregate amount of \$20,000,000.
Final Valuation Date:	May 7, 2027, being the third Exchange Day (defined in the product supplement) before the Maturity Date (defined below).
Maturity Date:	May 12, 2027 (approximately a ten year term). See "Description of the Equity, Unit and Debt Linked Securities – Maturity Date and Amount Payable" in the product supplement.
Objective of the Debt Securities:	The Debt Securities have been designed for investors seeking a return based on the Bank's proprietary multi-factor model referred to as the RBC 8-Factor Quantitative Model (the " <b>Model</b> "), with the ability to allocate to fixed income investments based on the trend of the S&P/TSX Composite Index (the " <b>Index</b> ") using the Strategy (defined below). The goal of the Strategy is to be exposed to the shares selected by the Model when the trend is positive for the equity markets and to reduce or eliminate this exposure as the trend for the equity markets becomes negative.
Principal at Risk Securities:	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
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supplement.

Return of CapitalThe Debt Securities are "RoC Securities". See "Description of the Equity, Unit andSecurities:Debt Linked Securities - Return of Capital Securities" in the product supplement.

**Portfolio:** The notional portfolio (the "**Portfolio**") will consist of assets allocated dynamically over the term to maturity of the Debt Securities between an Equity Investment (defined below) and/or a Fixed Income Investment (defined below), determined and reallocated on a monthly basis using the Strategy. An amount equal to \$97.85 (being equal to the Principal Amount less the \$2.00 selling commission and \$0.15 upfront portion of the Note Program Amount (defined below) per Debt Security) will be notionally invested in the Portfolio on the Issue Date.

As of April 28, 2017, the Portfolio was allocated equally between a Fixed Income Investment and an Equity Investment. The yield to maturity of the Portfolio as of May 1, 2017 was 0.9376% based on the Fixed Income Investment portion of the Portfolio. The indicated dividend yield of the Portfolio as of April 28, 2017 was 2.69% based on the Equity Investment portion of the Portfolio and assuming an equal weighting of the Underlying Equity Securities (defined below). There will be no Partial Principal Repayments calculated during those months where the Portfolio is allocated entirely to a Fixed Income Investment. Partial Principal Repayments are only calculated during those months that have an Equity Investment allocation and only to the extent of the portion of the Portfolio allocated to the Equity Investment. See "Partial Principal Repayments".

THE ALLOCATION OF THE PORTFOLIO AS BETWEEN A FIXED INCOME INVESTMENT AND/OR AN EQUITY INVESTMENT MAY CHANGE BETWEEN THE DATE OF THIS PRICING SUPPLEMENT AND THE ISSUE DATE BASED ON THE APPLICATION OF THE STRATEGY ON THE ALLOCATION DATE THAT OCCURS FOLLOWING THE DATE OF THIS PRICING SUPPLEMENT AND PRIOR TO THE ISSUE DATE. SEE "THE STRATEGY".

The allocation of the Portfolio as between a Fixed Income Investment and/or an Equity Investment will be published at www.rbcnotes.com.

The Calculation Agent (defined below) will adjust the Portfolio 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 Portfolio. See "Extraordinary Events and Substitution Events".

**Equity Investments:** On any Allocation Date (defined below) on which the Portfolio is to consist in whole or in part of an Equity Investment, the "Equity Investment" will be a notional portfolio composed of common shares (the "Underlying Equity Securities" and each, an "Underlying Equity Security") of 25 ranked issuers (the "Underlying Equity Security Issuers" and each, an "Underlying Equity Security Issuer") resulting from the application of the Model on such Allocation Date. The initial Equity Investment, if any, (the "Initial Equity Investment") will be equally weighted among the 25 ranked issuers resulting from the application of the Model using the most recent monthly rankings generated by the Model since its August 5, 2011 inception, adjusted as described below. Underlying Equity Securities of an Underlying Equity Security Issuer will remain in an Equity Investment until they fall below the top 50 rankings as determined by the Model, in which case such securities will be removed from the Equity Investment. The Underlying Equity Securities will be notionally purchased over the five Exchange Days immediately following the applicable Allocation Date, at a price equal to the average of the Closing Price (defined below) for the five Exchange Days immediately following such Allocation Date. Where the acquisition relates to the initial acquisition of Underlying Equity Securities, if any, that will be in the Portfolio on the Issue Date, the notional purchases will be made over the five Exchange Days commencing on and immediately following the Initial Valuation Date, at a price equal to the average of the Closing Price for the five Exchange Days commencing on and immediately following the Initial Valuation Date. The Underlying Equity Securities of each Underlying Equity Security Issuer will be equally weighted on the purchase date of such securities.

Following any Allocation Date on which the Portfolio is to be reallocated, in whole or in part, from a Fixed Income Investment to an Equity Investment, the applicable portion of the Fixed Income Investment will be notionally sold as described in the Fixed Income Investments section. Following such notional sale of the Fixed Income Investment (or a portion thereof), the notional proceeds will be used to notionally purchase the applicable portion of the Equity Investment in the same manner as described above.

Where an Equity Investment is disposed of, the Underlying Equity Securities will be notionally sold over the five Exchange Days immediately following the applicable Allocation Date at a price equal to the average of the applicable Closing Price for the five Exchange Days immediately following such Allocation Date. Where the disposition relates to the payment of the Redemption Amount (defined below) on the Maturity Date, the notional sale will be made at the average of the applicable Closing Price during the five Exchange Days immediately prior to and ending on the Final Valuation Date.

The Debt Securities do not represent an interest in the Underlying Equity Securities and holders 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 Portfolio is notional only, meaning that the assets in the Portfolio 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 Portfolio are notional actions only.

"Closing Price" means, in respect of an Underlying Equity Security on any Exchange Day, the official closing price for that 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 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 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 Portfolio can be obtained from the public disclosure filed on www.sedar.com 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 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 the Bank's 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:	The Underlying Equity Securities of an Underlying Equity Security Issuer will be removed from an Equity Investment over the first five Exchange Days of the month, other than a month in which the Final Valuation Date and/or Maturity Date occurs, on which the Model is applied and such Underlying Equity Security Issuer falls below the top 50 rankings. Any Underlying Equity Securities so removed will be notionally sold and the proceeds from such disposition will be used to notionally purchase the Underlying Equity Securities of the next highest Underlying Equity Security Issuer not already in the Equity Investment. The notional purchase and sale transactions will be effected at a price equal to the average of the applicable Closing Price over the first five Exchange Days of the month.
Rebalancing of an Equity Investment:	An Equity Investment will be rebalanced back to an equal weighting on a quarterly basis. Any Underlying Equity Securities to be removed from the Equity Investment 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 Equity Investment. Such notional acquisitions or dispositions will occur on the first Business Day (defined in the program supplement) of the calendar month immediately following the completion of each calendar quarter that the Debt Securities are outstanding, other than a month in which the Final Valuation Date and/or Maturity Date occurs, at the applicable Closing Price of the Underlying Equity Securities being notionally purchased and sold on such day.
The Model:	The Model is designed to provide an objective measure of the performance potential of the equity securities, including dividends and other distributions. The Model does not rely on subjective judgment, but rather uses the latest trailing quarterly earnings, consensus earnings estimates, book values and equity prices to rank the stocks of the largest 100 dividend paying issuers in the Index (excluding income trusts and the Bank)
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in order to construct a notional portfolio of 25 stocks. Each month, the Model will rank the 100 stocks that meet the criteria for inclusion as calculated on the last Business Day of the most recently completed calendar quarter, based on eight valuation parameters:

- Price to Earnings
- Price to Book Value
- Quarterly Earnings Growth
- Return on Equity
- "Earnings Surprise"
- Estimate Revisions
- 90-Day Price Change
- 180-Day Price Change

See "Appendix A – Summary Information Regarding the Model" for a description of the eight valuation parameters of the Model.

The Model assumes that the best indicators of the growth potential of an issuer's equity securities are: low price to earnings ratio, low price to book value ratio, high quarterly earnings growth, high return on equity, high "earnings surprise", high and positive estimate revisions, high 90-day price change and high 180-day price change.

For each of the eight 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 issuer. The stock which most strongly exhibits a given valuation parameter will be assigned a score of "1" while the stock that least strongly exhibits that same valuation parameter will be assigned a score of "100". For example, the stock in the stock universe with the highest return on equity will be assigned a score of 1 and the stock with the lowest return on equity will be assigned a score of 100. Each stock will receive eight scores in total, one in respect of each of the valuation parameters. The sum of those eight scores will be used to determine the stock's "composite score". This means that the Model does 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 the best scoring stock will be ranked 1 and the worst scoring stock will be ranked 100.

An Equity Investment will be composed of the Underlying Equity Securities of the 25 Underlying Equity Security Issuers resulting from the application of the Model to select the Initial Equity Investment, as adjusted using the most recent monthly rankings and weightings generated by the Model to remove the Underlying Equity Securities of an Underlying Equity Security Issuer which falls below the top 50 rankings and to rebalance, on a quarterly basis, to an equal weighting of Underlying Equity Securities. See "Removal of Underlying Equity Securities from an Equity Investment" and "Rebalancing of an Equity Investment".

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

**Fixed Income Investments:** A "**Fixed Income Investment**" will be composed of a notional investment made following an Allocation Date in a notional five-year zero coupon bond (each, a "**Bond**") with a yield to maturity equal to the five-year Canadian dollar inter-bank zero coupon swap rate, as calculated by the Calculation Agent, using industry-standard bootstrapping methodology for determining zero coupon rates, based on Canadian dollar inter-bank swap rates quoted by Bloomberg under its Interest Rate Swap Rates service, on the date when the Fixed Income Investment was 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 Canadian dollar inter-bank bid zero

coupon swap rate for a five-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 the 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 five-year Canadian dollar 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.

If the Calculation Agent determines that bonds are to be notionally purchased from the notional proceeds of Extraordinary Distributions (defined below) at a time when Bonds are notionally included in the 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 inter-bank bid zero coupon swap rate for a term equal to the term to maturity of the Bonds notionally included in the Portfolio at such time. Any bonds notionally purchased in the manner described in this paragraph will be treated for all purposes as if they were "Bonds", as defined above.

Following any Allocation Date on which the Portfolio is to be reallocated, in whole or in part, from an Equity Investment to a Fixed Income Investment, the applicable portion of the Equity Investment will be notionally sold as described in the Equity Investments section. Following such notional sale of the Equity Investment (or a portion thereof), the notional proceeds will be used to notionally purchase the applicable portion of the Fixed Income Investment. On the first Exchange Day following any Allocation Date in which the Portfolio is to be reallocated, in whole or in part, from a Fixed Income Investment to an Equity Investment, the applicable portion of the Fixed Income Investment will be notionally sold. The proceeds of such notional sale will be used to notionally purchase the applicable portion of the Equity Investment as described in the Equity Investment section.

The five-year inter-bank zero coupon swap rate 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 five-year inter-bank zero coupon discount factor 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 five-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 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 five-year inter-bank zero coupon discount factor quoted by Bloomberg as of May 4, 2017 was approximately 0.93604 and the corresponding five-year Canadian dollar inter-bank zero coupon swap rate as of May 4, 2017 was approximately 0.954356%.

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. 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 (each, an "Allocation Date"), the "Strategy" will compare the daily official closing level of the Index quoted on www.standardandpoors.com (the "Closing Level") to the average daily official closing level of the Index quoted on www.standardandpoors.com for the 200 Exchange Days immediately preceding and including the Allocation Date (the "Moving Average") to determine the asset allocation for the following month. If the Closing Level of the Index on any Allocation Date is greater than 105% of the Moving Average, the Portfolio for the immediately following month will be composed solely of an Equity Investment. If the Closing Level of the Index on any Allocation Date is less than 95% of the Moving Average, the Portfolio for the immediately following month will be composed solely of a Fixed Income Investment. If the Closing Level of the Index on any Allocation Date is between 95% and 105% (inclusive) of the Moving Average, the Portfolio for the immediately following month will be composed equally of a Fixed Income Investment and an Equity Investment. If the Closing Level of the Index on the immediately preceding Allocation Date was also between 95% and 105% (inclusive) no reallocation will be made. If the Portfolio is composed in part of a Fixed Income Investment, and an additional Fixed Income Investment is required to be made due to the application of the Strategy (that is, if the Closing Level of the Index on an Allocation Date is less than 95% of the Moving Average, and on the preceding Allocation Date the Closing Level was between 95% and 105% (inclusive) of the Moving Average), the additional Fixed Income Investment will have the same maturity date and terms as the existing Fixed Income Investment. Where the Strategy reallocates the Portfolio, in whole or in part, from an Equity Investment to a Fixed Income Investment, or from a Fixed Income Investment to an Equity Investment, notional sales and notional purchases will be made as described in the Equity Investments and Fixed Income Investments sections. The allocation of the Portfolio as between an Equity Investment and/or a Fixed Income Investment will be published at www.rbcnotes.com. **Partial Principal** Holders will receive partial repayments of the Principal Amount (the "Partial Principal Repayments" and each, a "Partial Principal Repayment") equal to the **Repayments:** amount of Equity Distributions (defined below) during the immediately preceding calendar quarter, 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 quarterly no later than the fifth Business Day following the end of each calendar quarter (each, a "Partial Principal Repayment Date") during the term of the Debt Securities other than the calendar guarter in which the Final Valuation Date falls. In addition, any non-cash Equity Distributions will be converted into their notional cash value, as determined by the Calculation Agent acting in good faith, and paid out as Partial Principal Repayments on the Partial Principal Repayment Date following each calendar quarter in which such non-cash Equity Distributions are paid. Notwithstanding the foregoing, the total Partial Principal Repayments to holders

	throughout the term of the Debt Securities will not exceed \$99.00 per Debt Security. Thereafter, any Equity Distributions in excess of \$99.00 per Debt Security will be notionally reinvested in the Portfolio on the first Business Day of the calendar quarter in accordance with the allocation of the Portfolio at the beginning of such calendar quarter.
	Extraordinary Distributions will be reinvested in the Portfolio on a Business Day to be determined by the Calculation Agent, as described under "Extraordinary Distributions" below.
	"Equity Distributions" means any dividends or other distributions paid by the Underlying Equity Security Issuers on the Underlying Equity Securities notionally included in the Portfolio that are not Extraordinary Distributions.
	Other than the Partial Principal Repayments, no other payment on the Debt Securities will be payable by the Bank during the term of the Debt Securities.
Extraordinary Distributions:	Extraordinary Distributions paid during the immediately preceding calendar quarter will be notionally reinvested in the Portfolio on a Business Day to be determined by the Calculation Agent in accordance with the allocation of the Portfolio on the date of reinvestment. With respect to Extraordinary Distributions, the Calculation Agent will have discretion in determining the timing of such notional reinvestment and whether non-cash Extraordinary Distributions will be notionally added to the Portfolio in accordance with the restrictions placed on the Portfolio by the Model or converted to their notional cash value and notionally reinvested in the Portfolio in accordance with the allocation of the Portfolio on the date of reinvestment.
	Underlying Equity Securities and Bonds (as applicable) to be notionally purchased as a result of Extraordinary Distributions will be purchased on a <i>pro rata</i> basis, based on their then current weighting in the Portfolio, unless the Portfolio consists entirely of a Fixed Income Investment at such time, in which case a 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 Bonds will be notionally purchased as described under "Fixed Income Investments" above.
	"Extraordinary Distributions" means any dividends or other distributions paid by an Underlying Equity Security Issuer on the Underlying Equity Securities notionally included in the 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.
Outstanding Principal Amount:	The <b>"Outstanding Principal Amount</b> " 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 made on the Debt Security at or prior to the particular time.
Variable Return:	The <b>"Variable Return</b> " 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 Portfolio (the "Value of the Portfolio") 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 Investment and Fixed
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	Income Investment that is in the Portfolio on such date, plus (a) any cash not yet notionally invested and (b) an amount equal to any Equity Distributions and Extraordinary Distributions (or the cash value of non-cash Equity Distributions and Extraordinary Distributions, as determined by the Calculation Agent acting in good faith) not yet reinvested in the Portfolio or paid to holders as a Partial Principal Repayment, as applicable, at such time.
	The net value of the Portfolio (the " <b>Net Value of the Portfolio</b> ") for the Debt Securities on any Business Day will be calculated by the Calculation Agent and will be the Value of the Portfolio less the ongoing portion of the Note Program Amount.
	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 Bonds that would have been otherwise notionally included initially in the Portfolio, and therefore the initial NAV per Debt Security, the Variable Return and the Redemption Amount. The ongoing annual component of the Note Program Amount will be calculated based on the Value of the Portfolio and will accrue daily and be satisfied quarterly in arrears by liquidating a <i>pro rata</i> (based on their then current weighting in the Portfolio) number of Underlying Equity Securities notionally held in an Equity Investment and/or a portion of a Fixed Income Investment, as the case may be, thereby reducing the number of Underlying Equity Securities and/or the value of the Bonds in the Portfolio and therefore the NAV per Debt Security, the Variable Return and the Redemption Amount.
	97.85% of the Principal Amount of the Debt Securities will be notionally invested on the Issue Date. The NAV per Debt Security will be approximately \$97.85 on the Issue Date.
	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 Portfolio divided by the number of Debt Securities outstanding on such Business Day. The NAV per Debt Security will fluctuate throughout the term with the Net Value of the Portfolio and may 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.
Payment at Maturity:	At maturity, each holder of a Debt Security will receive a payment equal to the Redemption Amount. The " <b>Redemption Amount</b> " 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.
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, at 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 or value of an Underlying Equity 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 addition, for purposes of the Debt Securities, an "Extraordinary Event" will be deemed to have occurred at any time when there are less than 100 dividend paying companies in the Index. If such an Extraordinary Event occurs, in addition to the other actions that the Bank is entitled to take, the Bank will be entitled to select the notional portfolio of 25 Underlying Equity Securities based on the application of the Model to such decreased number of dividend paying companies in the Index. 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 the 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 are available, from the Portfolio and the proceeds from such disposition will be used to notionally purchase the highest ranked stock not already in the Portfolio as determined by the Model (the "**Replacement Underlying Equity Security**");

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

(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 period of 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.

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.

"**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 Model or the making of any necessary changes to the 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 Commission and Agency Fees Payable to the Dealers

Expenses:

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 an ongoing annual amount of 1.65% of the Value of the Portfolio. The upfront amount and the ongoing annual amount are referred to as the "**Note Program Amount**". The ongoing annual component of the Note Program Amount 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 Strategy, the Model and the Portfolio, 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 Portfolio 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 portion of the Note Program Amount 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 an Equity Investment and/or a portion of a Fixed Income Investment, as the case may be, thereby reducing the number of Underlying Equity Securities and/or the value of the Bonds notionally included in the Portfolio and therefore reducing the Value of the Portfolio. The number of Underlying Equity Securities or the value of the Bond 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, the Value of the 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 the Note Program Amount will reduce the return that otherwise would have been earned by an investor by a cumulative total of \$1.64 after one year, \$5.10 after three years, \$8.79 after five years and \$19.02 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 \$136.46 (equivalent to an annually compounded rate of return of 3.180%).

The above-noted dollar values and the Value of the Portfolio are used for illustration purposes only. These calculations and the assumption of the Value of the Portfolio's growth rate are not estimates or forecasts of the Value of the Portfolio, and therefore the ongoing annual component of the Note Program Amount 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 Portfolio from the Issue Date to the Maturity Date 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, RRIFs, RESPs, RDSPs, DPSPs and TFSAs. 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 Portfolio. 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

The Model does 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 quarterly earnings, consensus earnings estimates, book values and equity prices as inputs. Due to its objective nature, the Model could result in the Portfolio favouring sectors that demonstrate the Model's desired characteristics, thus reducing the overall diversification of the Portfolio in circumstances where the Portfolio is composed in whole or in part of an Equity Investment. The Model has not been designed to produce a sector neutral Equity Investment. The overall diversification could be further reduced in circumstances where the Portfolio is composed in whole or in part of a Fixed Income Investment, as all or part of the Portfolio would 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 Model 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 "lowquality market rally"), it is not uncommon for an Equity Investment to perform poorly or systematically underperform the Index for a period of time as a result of the Model relying on the eight valuation parameters selected based on traditionally desirable investment metrics. The Model is 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

Although the Strategy is designed to ensure that the Portfolio will be wholly or partly composed of a Fixed Income Investment during periods of market volatility, there can be no assurance that the Portfolio will be reallocated to a Fixed Income Investment in advance of a period of market volatility. The Strategy may not require a reallocation to a Fixed Income Investment even if there is market volatility, or the Strategy may not require a reallocation prior to periods of market volatility, as the allocation of the Portfolio between Equity Investments and Fixed Income Investments is based on the Closing Level of the Index on the most recent Allocation Date. As the Strategy will not be able to respond to any market volatility that occurs following an Allocation Date until the next Allocation Date, holders will be exposed to any market volatility until the next Allocation Date. In addition, to the extent that the Portfolio is reallocated, in whole or in part, from an Equity Investment to a Fixed Income Investment, the Underlying Equity Securities will be notionally sold at a price equal to the average of their Closing Prices for the five Exchange Days following the applicable Allocation Date. Accordingly, any notional losses on such Equity Investment would be crystallized as a result of the reallocation of all or a part of the Portfolio on an Allocation Date, which could negatively impact the return on the Debt Securities.

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

The return, if any, on the Debt Securities, may be limited to returns on Fixed Income Investments, which could be limited. There can be no assurance that the Portfolio will be composed in whole or in part of Equity Investments at any point over the term of the Debt Securities. As the allocation of the Portfolio between Equity Investments and Fixed Income Investments is based on the Closing Level of the Index on the most recent Allocation Date, the Strategy could result in the Portfolio being composed solely of Fixed Income Investments over all or a part of the term of the Debt Securities. The Portfolio may perform poorly or systematically underperform the Index for a period of time if the Portfolio is composed in whole or in part of the Fixed Income Investment 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 Portfolio 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 Portfolio and the amount, if any, of the Partial Principal Repayments, holders may not be repaid the amount they invested in the Debt Securities (other than \$1 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 Portfolio. 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 dividend or other distribution payments made by the Underlying Equity Security Issuers. 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, any reallocation to a Fixed Income Investment will result in a reduction of Partial Principal Repayments, as a result of the Equity Investment being reduced or eliminated.

#### 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 such Equity Investment through an investment in the Debt

Securities, the investor will receive quarterly Partial Principal Repayments equal to the amount of the Equity Distributions, and 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.

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

If an investor were to purchase Equity Investments or Fixed Income Investments directly in accordance with the Strategy, 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/or the Fixed Income Investments directly would likely incur transaction fees (such as commissions). In addition, the Strategy involves a monthly allocation of the Portfolio between Equity Investments and/or Fixed Income Investments. An investor that wishes to replicate the Strategy by investing directly in the Equity Investments and/or Fixed Income Investments would be required to purchase and sell Equity Investments and/or Fixed Income Investments from time to time in accordance with the Strategy in the secondary market in order to replicate the Strategy.

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 Portfolio. See "Equity Investments" and "Fixed Income Investments".

In addition, the tax implications associated with holding the Debt Securities as compared to holding Equity Investments or 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 take into account the ongoing annual component of the Note Program Amount, and does not represent a minimum price at which the Bank, RBC DS or any of our affiliates would be willing to purchase the Debt Securities in any secondary market (if any exists) at any time. If you attempt to sell the Debt Securities prior to maturity, their market value may be lower than the initial estimated value and price you paid for them. This is due to, among other things, changes in the prices of the Equity Investments, if

any, and/or the Fixed Income Investments, if any, 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. The initial estimated value of the Debt Securities was calculated by deducting the **Preparation of Initial** upfront portion of the Note Program Amount and the selling commissions payable to **Estimated Value:** the Dealers from the Principal Amount. The initial estimated value of the Debt Securities does not take into account the ongoing annual component of the Note Program Amount. 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 Portfolio 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 Strategy, the Model and the Portfolio, 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) conflicts of interest. Suitability for You should consult with your advisors regarding the suitability of an investment in the Investment: 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 based on the trend of the Index investors who believe that the Strategy will protect them from market volatility by allocating all or part of the Portfolio to a Fixed Income Investment based on the trend of the Index investors seeking an investment product with potential exposure (subject to allocations of the Portfolio to a Fixed Income Investment as required by the Strategy) to the large-cap segment of the Canadian equity market 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 Model 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

#### Book-entry Only Securities:

The Debt Securities will be issued through the "book-entry-only system" and must be purchased, transferred or redeemed through RBC DS or using the FundSERV network (see "Transfers of Debt Securities" below). On the Issue Date, the Debt Securities will be registered in the name of RBC DS or its nominee, as the case may be, which will hold such Debt Securities as depository on behalf of the registered dealers through whom the Debt Securities are purchased (i.e., the members of RBC DS' distribution network that participate in the offering as "selling firms" and not as dealers under the base shelf prospectus). RBC DS or one of its affiliates will maintain a record of all of the beneficial owners of the Debt Securities.

Except as described below, a purchaser acquiring a beneficial interest in the Debt Securities will not be entitled to a certificate or other instrument from the Bank, any trustee or the depository evidencing that purchaser's interest therein, and such purchaser will not be shown as the registered holder of the Debt Securities on the records maintained by the depository. Each such purchaser of Debt Securities will receive a customer confirmation of purchase from the registered dealer through whom the Debt Securities are purchased in accordance with the practices and procedures of that registered dealer.

As long as the Debt Securities are held in the book-entry-only system maintained by RBC DS, the Bank will recognize only RBC DS as the holder of the Debt Securities and the Bank will make all payments on the Debt Securities to RBC DS. RBC DS will in turn make payments to beneficial owners, by distributing such payments through the FundSERV network. The Bank understands that RBC DS does so under agreements it has made with the registered dealers through whom the Debt Securities are purchased; RBC DS is not obligated to do so under the terms of the Debt Securities.

Under this arrangement and pursuant to the *Securities Transfer Act, 2006* (Ontario) (the "**STA**"), investors will not own the Debt Securities directly. Instead, they will own beneficial interests in the Debt Securities, through RBC DS and, if applicable, any other registered dealer through whom the Debt Securities are purchased. As long as the Debt Securities are held in the book-entry-only system, investors will be indirect owners, and not registered holders, of Debt Securities. Under the STA, RBC DS has the rights and obligations of a securities intermediary *vis-á-vis* any investors who purchase their beneficial interests from RBC DS.

Neither the Bank nor the Dealers (other than RBC DS) will assume any liability for: (a) any aspect of the records relating to the beneficial ownership of the Debt Securities held by a depository or the payments or deliveries relating thereto; (b) maintaining, supervising or reviewing any records relating to the Debt Securities; or (c) any advice or representation made by or with respect to a depository, including those contained in this prospectus, relating to the rules governing the depository or any action to be taken by the depository or at the direction of the selling firms. The depository acts as the agent and depository for the selling firms, who in turn are agents for the beneficial owners. As a result, for payment or deliveries made by or on behalf of the Bank to the depository in respect of the Debt Securities, the beneficial owners of the Debt Securities must look solely to the selling firms, who in turn will look to the depository for such payment or deliveries.

As indirect holders of Debt Securities, investors should be aware that, except in the circumstances described below, they: (a) may not have Debt Securities registered in their name; (b) may not have physical certificates representing their interest in the Debt Securities; (c) may not be able to sell the Debt Securities to institutions required by law

to hold physical certificates for securities they own; and (d) may be unable to pledge Debt Securities as security.

Debt Securities in fully registered and certificated form will be issued to beneficial owners of Debt Securities only if: (i) required by applicable law; (ii) RBC DS' bookentry-only system ceases to exist; (iii) the Bank or RBC DS advises that RBC DS is no longer willing or able to properly discharge its responsibilities as depository with respect to the Debt Securities and the Bank is unable to locate a qualified successor; (iv) the Bank, at its option, decides to terminate its present arrangements with RBC DS; (v) if an event of default has occurred with regard to the Debt Securities and has not been cured or waived; or (vi) as otherwise agreed by the Bank and RBC DS.

If the Debt Securities are issued in fully registered and certificated form in the circumstances described above, any Partial Principal Repayments will be paid by the Bank to the registered holder. The Redemption Amount due at maturity will be paid upon surrender thereof at any branch of the Bank in Canada.

# **Transfers of Debt Securities**

Transfers of ownership of the Debt Securities will be effected only through records maintained by RBC DS or one of its affiliates, as the case may be, with respect to interests of the beneficial owners. If you hold Debt Securities and desire to purchase, sell or otherwise transfer ownership of or other interests in Debt Securities, you may do so only through RBC DS or by using the FundSERV network.

Your ability to pledge Debt Securities or otherwise take action with respect to your interest in Debt Securities (other than through RBC DS or by using the FundSERV network) may be limited due to the lack of a physical certificate.

#### **Global Securities**

The Debt Securities will be issued as book-entry only securities in fully registered form and will be represented by a global security (the "**Global Security**") that the Bank will deposit with and register in the name of RBC DS, or its nominee, as depository. The Global Security may also be held by the Bank in its capacity as domestic custodian for the depository. Except in the circumstances described above, owners of beneficial interests in book-entry securities will not be entitled to physical delivery of securities in certificated form. The Bank will make payments of all amounts payable on the Debt Securities to the depository. The Global Security may not be transferred to the name of a beneficial owner except in the special circumstances described above.

See "Description of the Securities – Legal Ownership" in the program supplement.

Listing:

No listing. 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 Portfolio and the daily closing price for the Debt Securities

	may be accessed at 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 (" <b>Early Trading Charge</b> ") equal to a percentage of the Principal Amount determined as set out below.
	If Sold Within the Following No. of Days from Issue DateEarly Trading Charge ( $\%$ of Principal Amount)1-180 days4.30%181-270 days3.30%271-360 days2.55%361-450 days1.80%451-540 days1.20%541-630 days0.80%631-720 days0.40%Thereafter0.00%
Fiscal Agent:	RBC DS. See "Description of the Securities – Fiscal Agency and Calculation Agency 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 Portfolio and the Model, the Calculation Agent may rely solely on the data provided and calculations and determinations made by a third party provider (the " <b>Platform Provider</b> "). 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 Investment 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 <i>Income Tax Act</i> (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 " <b>Resident</b> <b>Holder</b> ". 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. 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 Portfolio through an investment in the Debt Securities is different than, and may be either
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advantageous or disadvantageous relative to, the tax treatment resulting from exposure to the Portfolio through a direct holding of the Underlying Equity Securities in the Portfolio. See "Risk Factors".

# Past Performance of TEAM Securities Generally and Additional Information:

See Appendix C "Past Performance of TEAM Securities Generally and Additional Information" for past performance of RBC TEAM RoC Yield Securities ("**TEAM Securities**") generally and additional information on TEAM Securities.

#### **APPENDIX A**

# SUMMARY INFORMATION REGARDING THE MODEL

The following is a summary description of the Model based on information obtained from the Calculation Agent, available at www.rbenotes.com.

The Model is designed to provide an objective measure of the total return potential of equity securities. The investment strategy based on the rankings generated by the Model was initially implemented on August 5, 2011. The Model uses the latest trailing quarterly earnings, consensus earnings estimates, book values and equity prices to rank the stocks of the largest 100 dividend paying companies in the S&P/TSX Composite Index (excluding income trusts and the Bank) to construct a notional portfolio of 25 stocks. The Model does not rely on subjective judgment, and the strategy and process are applied consistently and objectively through time. Each month, the Model will rank the 100 stocks that meet the criteria for inclusion, as calculated on the last Business Day of the most recently completed calendar quarter, based on eight valuation parameters:

- **Price to Earnings:** calculated using the current share price for the shares of a company divided by the latest four quarter trailing recurring earnings for that company. 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.
- **Price to Book Value**: calculated using the current share price for the shares of a company divided by the latest available book value for that company. Price to Book Value is expressed as a ratio, and a low Price to Book Value ratio is better than a high Price to Book Value ratio.
- Quarterly Earnings Growth: calculated as the percentage difference between a company's most recent four quarter trailing recurring earnings and its four quarter trailing recurring earnings from one quarter prior. Quarterly Earnings Growth is expressed as a percentage growth rate over the past quarter, and high values are more favourable than low values.
- **Return on Equity**: calculated using the most recent four quarter trailing recurring earnings for a company divided by its latest available book value. Return on Equity is expressed as a percentage, and a high Return on Equity is better than a low Return on Equity.
- "Earnings Surprise": calculated as the percentage difference between a company's most recent reported quarterly recurring earnings and the estimated Consensus Earnings Estimate for the same quarter. "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 quarterly earnings estimates of each analyst that covers an Underlying Equity Security as reported by Morningstar Research Inc. ("Morningstar") (or such other service as may replace Morningstar for the purpose of displaying consensus earnings estimates).
- 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 90 days prior. Estimate Revisions is expressed as a percentage change, and high and positive Estimate Revisions are better than low and negative Estimate Revisions.
- **90-Day Price Change**: calculated as the percentage change in a company's price per share over the previous 90 days. 90-Day Price Change is expressed as a percentage, and higher values are favoured over lower values.
- **180-Day Price Change**: calculated as the percentage change in a company's price per share over the previous 180 days. 180-Day Price Change is expressed as a percentage, and higher values are favoured over lower values.

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.

# Performance Characteristics of the Model

The Model was developed using 25 years of publicly-available monthly historical data. In the course of developing the Model, the Bank has run portfolio simulations to test the hypothetical returns of this investment methodology through various market conditions and numerous business cycles. Over the course of developing and testing the Model, the Bank has observed that the hypothetical returns of the Model often, but do not always, exceed, the Index. However, over the past 25 years, there have been market conditions during which the hypothetical performance of the Model has underperformed the Index. This has occurred in market conditions, discussed in more detail below, where some or all of the factors used by the Model to project future return potential may lose their predictive power. Since December 1985, such market conditions have arisen approximately every five years. During the calendar years when those market conditions are most pronounced, the performance of the Model has trailed the return on the Index by approximately 5%. The hypothetical historical returns of the Model do not reflect the fees and expenses payable in respect of the Debt Securities.

These hypothetical periods of underperformance are generally of two types: periods when the total return of the Index has been skewed by the outperformance of a small number of stocks that are heavily weighted on the Index, and periods of "low-quality market rallies". The most pronounced example of the former occurred in 1999, when the total return of the Index exceeded its return for any of the preceding calendar years since 1985. In that case, over half of the Index's extraordinary return was attributable to a single stock. Because an Equity Investment is equally weighted, it is likely that the Model would underperform in circumstances where the Index's total return is so heavily dependent on a relatively small number of issuers.

A low-quality market rally occurs following a market bottom when stocks with traditionally undesirable investment metrics sometimes become the best performing stocks for a period of time during the subsequent recovery. Due to the fact that the Model, through its use of objective factors that are intended to measure desirable investment metrics (such as the price to earnings ratio), would not, by its nature, select such stocks for an Equity Investment, it is likely that the Model would underperform the Index during these market conditions.

# Historical data and past performance are not indicative of future performance.

# **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 and deals at arm's length with and is not affiliated with the Bank (a "**Holder**").

This summary is based upon the current provisions of the Tax Act and the regulations thereunder (the "**Regulations**"), all specific proposals to amend the Tax Act or such Regulations publicly announced by the federal Minister of Finance prior to the date hereof (the "**Proposals**") and counsel's understanding of the current administrative 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 Holder will neither undertake nor arrange a transaction in respect of the Debt Securities primarily for the purpose of obtaining a tax benefit, has not entered into a "derivative forward agreement" (as defined in the Tax Act) in respect of the Debt Securities are not issued at a discount.

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

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".

#### Holders Resident in Canada

The following discussion applies to a Holder who, at all relevant times, for the purposes of the Tax Act and any applicable income tax treaty or convention, is an individual (other than a trust) resident in Canada 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 all subsequent taxation years, treated as capital property as a result of having made the irrevocable election permitted by subsection 39(4) of the Tax Act.

#### Partial Principal Repayments

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.

# 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, based on counsel's understanding of the CRA's current administrative practice there should be no deemed accrual of interest on a prescribed debt obligation until such time as the return thereon becomes determinable. Counsel has been advised that the Bank anticipates that throughout each taxation year ending before 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 understandings 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), including a taxation year in which such Resident Holder disposes of Debt Securities otherwise than to the Bank, except as described below under "Disposition of Debt Securities" where a Debt Security is transferred before such date.

### 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 immediately before that time. Alternatively, 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 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 Portfolio or changes in the Portfolio 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 and excludes such amount from the proceeds of disposition, 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. On an assignment or other transfer of a Debt Security by a Resident Holder (other than to the Bank on the Maturity Date), 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). 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.

# Holders Not Resident in Canada

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

Interest paid or credited or deemed to be paid or credited on the Debt Securities to a Non-Resident Holder (including any amount paid on their maturity or early repayment in full in excess of the Outstanding Principal Amount of the Debt Securities at that time and any interest deemed to be paid in certain cases involving the assignment or other transfer of a Debt Security to a resident or deemed resident of Canada likely including any excess of the price for which it is transferred to such a resident over its outstanding principal amount at the time of the transfer) generally will be subject to Canadian non-resident withholding tax. Under the Tax Act, such Canadian withholding tax is imposed at the rate of 25% of the gross amount of such interest. This withholding tax may be reduced pursuant to the terms of an applicable income tax treaty or convention between Canada and the country of residence of the Non-Resident Holder.

# **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**"), registered disability savings plans ("**RDSPs**"), registered education savings plans ("**RESPs**"), tax-free savings accounts ("**TFSAs**") 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 the Debt Securities are "prohibited investments" (as that term is defined in the Tax Act) for a TFSA, an RRSP or a RRIF, a holder of the TFSA, or an annuitant of the RRSP or the RRIF, as the case may be, (each a "**Plan Holder**") will be subject to a penalty tax as set out in the Tax Act. The federal budget of March 22, 2017 announced Proposals to extend these rules to impose the penalty tax on the holder of an RDSP, or the subscriber of an RESP, that acquires prohibited investments after that date. Debt Securities will be "prohibited investments" (as that term is defined in the Tax Act) to a TFSA, an RRSP or a RRIF of a Plan Holder (and, under such Proposals, to the holder of an RDSP, or a subscriber of an RESP) who has a "significant interest" (as defined in the Tax Act for purposes of the prohibited investment rules) in the Bank or who does not deal at arm's length, within the meaning of the Tax Act, with the Bank. Investors should consult their own tax advisors in this regard.

#### APPENDIX C

#### Past Performance of TEAM Securities Generally and Additional Information

As of April 28, 2017, the Portfolio was allocated equally between a Fixed Income Investment and an Equity Investment. Partial Principal Repayments are only calculated during those months that have an Equity Investment allocation and only to the extent of the portion of the Portfolio allocated to the Equity Investment. The pie chart below indicates the asset allocation of the Portfolio and industry allocation of the Equity Investment as of April 28, 2017.

# PORTFOLIO ALLOCATION - MAY 2017 EQUITY INVESTMENT

Sector	Symbol	Company	Weight	Rank	Dividend Yield (%)
Energy	ENF	Enbridge Income Fund Holdings Inc	4.02%	40	6.13
Materials	WFT	West Fraser Timber Co Ltd		1	0.46
	LUN	Lundin Mining Corp	3.80%	14	1.65
	CCL.B	CCL Industries Inc		17	0.73
	MX	Methanex Corp	3.85%	20	2.63
Industrials	WSP	WSP Global Inc	4.14%	5	3.02
	CAE	CAE Inc	4.21%	11	1.53
	WCN	Waste Connections Inc	4.30%	19	0.79
Consumer Discretionary	CTC.A	Canadian Tire Corp Ltd	4.18%	7	1.56
	DOL	Dollarama Inc	3.79%	10	0.37
	LNR	Linamar Corp	3.98%	13	0.83
	QSR	Restaurant Brands International Inc	4.17%	21	1.36
	MG	Magna International Inc	4.08%	26	2.60
Financials	BMO	Bank of Montreal	3.83%	2	3.64
	POW	Power Corp of Canada	4.04%	3	4.24
	MFC	Manulife Financial Corp	4.10%	6	3.43
	CM	Canadian Imperial Bank of Commerce	3.74%	8	4.61
	IAG	Industrial Alliance Insurance & Financial Services Inc	3.99%	9	2.43
	NA	National Bank of Canada	3.75%	18	4.22
	PWF	Power Financial Corp	3.99%	24	4.76
	BNS	The Bank of Nova Scotia	3.87%	32	4.01
	TD	The Toronto-Dominion Bank	3.79%	35	3.74
<b>Telecommunication Services</b>	RCI.B	Rogers Communications Inc	3.79%	4	3.07
Utilities	FTS	Fortis Inc/Canada	4.03%	22	3.60
	ACO.X	Atco Ltd/Canada	3.92%	30	2.64

Portfolio Additions			
DOL	Dollarama Inc	\$126.67	
RCI.B	Rogers Communications Inc	\$75.79	

Portfolio	o Deletions	
CSU	Constellation Software Inc/Canada	\$670.22
TECK.B	Teck Resources Ltd	\$26.73

#### **PORTFOLIO ALLOCATION**



The graph below represents the allocation of TEAM Securities between an Equity Investment and/or a Fixed Income Investment for the period September 7, 2012 to April 28, 2017. Prior historical asset allocations are not necessarily indicative of any future asset allocations for TEAM Securities.

#### **ASSET ALLOCATION**



Sep-12 Apr-13 Nov-13 Jun-14 Jan-15 Aug-15 Mar-16 Oct-16 May-17

#### **Historical Information**

This Historical Secondary Market Price chart below reflects the historical closing secondary market price of RBC TEAM RoC Yield Securities, Series 1P (the "Series 1P") for each day such secondary market was open for trading and the percentage change of the level of the Index since the issue date of Series 1P on September 7, 2012. The Series 1P is the initial implementation of the Strategy. The closing secondary market price of Series 1P on its issue date was \$100.00. For Series 1P, an amount equal to \$98.18 per debt security was notionally invested in the Portfolio on the issue date. The secondary market price at any particular time is the price at which a holder of TEAM Securities could dispose of such securities resold using the FundSERV network, excluding any applicable early trading charge. 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 TEAM 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 TEAM Securities could result in different secondary market prices for debt securities of different series of TEAM Securities. The historical secondary market price for TEAM Securities which are not Series 1P may differ from the historical secondary market price for Series 1P debt securities because the different Note Program Amounts for the different series of TEAM Securities may affect the secondary market price of such debt securities. A series of TEAM Securities with a Note Program Amount which is higher than the Note Program Amount for Series 1P would likely have a lower secondary market price than the secondary market price for Series 1P. Prior historical secondary market prices of Series 1P are not necessarily indicative of any future secondary market price for Series 1P or other TEAM 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 28, 2017	1 month	3 months	YTD	1 year	Since Inception*
RBC TEAM RoC Yield Securities, Series 1P, F- Class	0.19%	1.47%	2.95%	8.38%	5.51%
S&P/TSX Composite Index	0.25%	1.30%	1.95%	11.72%	5.30%

\*Since Inception is an annualized calculation.

Source: RBC Capital Markets Quantitative Research

<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 of such Debt Securities; 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, 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.

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