ROYAL BANK OF CANADA
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This pricing supplement amends and restates the pricing supplement filed on February 10, 2017

Pricing Supplement Dated February 10, 2017 To the Product Prospectus Supplement No. TP-2 Dated January 11, 2016, and the Prospectus Supplement and Prospectus, Each Dated January 8, 2016	$1,316,000 Auto-Callable Floating Rate and Contingent Coupon Barrier Notes Linked to the Lesser Performing of Two Equity Indices, Due February 13, 2020 Royal Bank of Canada

Royal Bank of Canada is offering Auto-Callable Floating Rate and Contingent Coupon Barrier Notes (the "Notes") linked to the lesser performing of two equity indices (each, a "Reference Index," and collectively, the "Reference Indices"). The Notes offered are senior unsecured obligations of Royal Bank of Canada. The Notes will pay a quarterly Floating Rate Coupon at the annual rate of the sum of 3 Month USD LIBOR plus 1%, regardless of the performance of the Reference Indices. In addition, the Notes will pay a quarterly Contingent Coupon at the annual rate of 3% (or 0.75% per quarter) if the level of each of the Reference Indices is greater than or equal to its Coupon Barrier on the applicable quarterly Coupon Observation Date. The Notes will not be listed on any securities exchange.

Reference Indices	Initial Level	Trigger Level and Coupon Barrier
S&P 500® Index ("SPX")	2,316.10	1,621.27, which is 70% of the Initial Level (rounded to two decimal places)
Russell 2000® Index ("RTY")	1,388.844	972.191, which is 70% of the Initial Level (rounded to three decimal places)

The Notes do not guarantee any return of principal at maturity. All payments on the Notes are subject to our credit risk.

Investing in the Notes involves a number of risks. See "Risk Factors" beginning on page PS-5 of the product prospectus supplement dated January 11, 2016, on page S-1 of the prospectus supplement dated January 8, 2016, and "Selected Risk Considerations" beginning on page P-7 of this pricing supplement.

The Notes will not constitute deposits insured by the Canada Deposit Insurance Corporation, the U.S. Federal Deposit Insurance Corporation or any other Canadian or U.S. government agency or instrumentality.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the Notes or determined that this pricing supplement is truthful or complete. Any representation to the contrary is a criminal offense.

Issuer:	Royal Bank of Canada	Listing:	None
Trade Date:	February 10, 2017	Principal Amount:	$1,000 per Note
Issue Date:	February 15, 2017	Maturity Date:	February 13, 2020
Coupon Observation Dates:	Quarterly, starting on May 10, 2017, as set forth below.	Coupon Payment Dates:	Quarterly, as set forth below.
Valuation Date:	February 10, 2020	Contingent Coupon:	Quarterly, at a rate of 3% per annum (or 0.75% per quarter)

Floating Rate Coupon:	Quarterly, at an annual rate equal to the sum of 3 Month USD LIBOR plus 1%	Maximum Annual Coupon:	3 Month USD LIBOR + 4%, if the Contingent Coupons are payable.

Initial Level:	For each Reference Index, its closing level on the Trade Date, as set forth above.
Final Level:	For each Reference Index, its closing level on the Valuation Date.
Contingent Coupon:	In addition to the quarterly Floating Rate Coupons, we will pay the Contingent Coupon on the applicable Coupon Payment Date if the closing level of each Reference Index is greater than or equal to its Coupon Barrier on the applicable Coupon Observation Date. You may not receive any Contingent Coupons during the term of the Notes.
Payment at Maturity (if held to maturity):	If the Notes are not called, in addition to the final Floating Rate Coupon, we will pay you at maturity an amount based on the Final Level of the Lesser Performing Reference Index: For each $1,000 in principal amount, $1,000 plus the Contingent Coupon at maturity, unless the Final Level of the Lesser Performing Reference Index is less than its Trigger Level. If the Final Level of the Lesser Performing Reference Indices is less than its Trigger Level, then the investor will receive at maturity, for each $1,000 in principal amount, a cash payment equal to: $1,000 + ($1,000 x Underlying Return of the Lesser Performing Reference Index) Even with the Floating Rate Coupons and any Contingent Coupons paid during the term of the Notes, your return on the Notes may be negative.
Lesser Performing Reference Index:	The Reference Index with the lowest Underlying Return.
Call Feature:	If the closing level of each Reference Index is greater than or equal to its Initial Level on any Call Observation Date, the Notes will be automatically called for 100% of their principal amount, plus the Floating Rate Coupon and the Contingent Coupon applicable to the corresponding Coupon Payment Date.
Call Observation Dates:	Quarterly, starting on February 12, 2018, as set forth below.
Call Settlement Dates:	Quarterly, as set forth below.
CUSIP:	78012KZQ3
Dividend Equivalent Payments:	Non-U.S. holders will not be subject to withholding on dividend equivalent payments under Section 871(m) of the U.S. Internal Revenue Code. Please see the section below, "Supplemental Discussion of U.S. Federal Income Tax Consequences," which applies to the Notes.

	Per Note	Total
Price to public(1)	100%	$1,316,000.00
Underwriting discounts and commissions(1)	2.25%	$29,610.00
Proceeds to Royal Bank of Canada	97.75%	$1,286,390.00

(1) Certain dealers who purchase the Notes for sale to certain fee-based advisory accounts may forego some or all of their underwriting discount or selling concessions. The public offering price for investors purchasing the Notes in these accounts may be between $977.50 and $1,000 per $1,000 in principal amount.

The initial estimated value of the Notes as of the date of this pricing supplement is $957.83 per $1,000 in principal amount, which is less than the price to public. The actual value of the Notes at any time will reflect many factors, cannot be predicted with accuracy, and may be less than this amount. We describe our determination of the initial estimated value in more detail below.

RBC Capital Markets, LLC, which we refer to as RBCCM, acting as agent for Royal Bank of Canada, received a commission of $22.50 per $1,000 in principal amount of the Notes and used a portion of that commission to allow selling concessions to other dealers of up to $22.50 per $1,000 in principal amount of the Notes. The other dealers may forgo, in their sole discretion, some or all of their selling concessions. See "Supplemental Plan of Distribution (Conflicts of Interest)" on page P-25 below.

We may use this pricing supplement in the initial sale of the Notes. In addition, RBCCM or another of our affiliates may use this pricing supplement in a market-making transaction in the Notes after their initial sale. Unless we or our agent informs the purchaser otherwise in the confirmation of sale, this pricing supplement is being used in a market-making transaction.

RBC Capital Markets, LLC

Auto-Callable Floating Rate and Contingent
Coupon Barrier Notes Linked to the Lesser
Performing of Two Equity Indices, Due February
13, 2020

SUMMARY

The information in this "Summary" section is qualified by the more detailed information set forth in this pricing supplement, the product prospectus supplement, the prospectus supplement, and the prospectus.

General:	This pricing supplement relates to an offering of Auto-Callable Floating Rate and Contingent Coupon Barrier Notes (the "Notes") linked to the lesser performing of two equity indices (the "Reference Indices").
Issuer:	Royal Bank of Canada ("Royal Bank")
Issue:	Senior Global Medium-Term Notes, Series G
Trade Date:	February 10, 2017
Issue Date:	February 15, 2017
Term:	Approximately three (3) years
Denominations:	Minimum denomination of $1,000, and integral multiples of $1,000 thereafter.
Designated Currency:	U.S. Dollars
Floating Rate Coupon:	We will pay you a Floating Rate Coupon during the term of the Notes, periodically in arrears on each Coupon Payment Date, at an annual rate equal to the sum of 3 Month USD LIBOR and 1%. The Floating Rate Coupon will be paid each quarter no matter how the Reference Indices perform. In no event will the Floating Rate be less than 0% per annum.
3 Month USD LIBOR:	A rate per annum equal to the London Interbank Offered Rate (British Banker's Association) for deposits in U.S. dollars for a period of three months that appears on Reuters page "LIBOR01" or any successor page, as of 11:00 a.m., London time, on the relevant Floating Rate Determination Date. For additional information as to the determination of this rate, please see the section "Description of the Notes We May Offer—LIBOR Notes" in the prospectus supplement.
Floating Rate Determination Dates:	The 3 Month USD LIBOR for each Interest Period will be the rate two London business days prior to the start of the applicable Interest Period, as determined by the Calculation Agent.
Interest Period:	Each period from and including a Coupon Payment Date (or, for the first period, the Issue Date) to but excluding the next following Coupon Payment Date.
Day Count Fraction:	30/360
Contingent Coupon:	In addition to the quarterly Floating Rate Coupons, we will pay you a Contingent Coupon during the term of the Notes, periodically in arrears on each Coupon Payment Date, under the conditions described below: · If the closing level of each Reference Index is greater than or equal to its Coupon Barrier on the applicable Coupon Observation Date, we will pay the Contingent Coupon applicable to that Coupon Observation Date. · If the closing level of either of the Reference Indices is less than its Coupon Barrier on the applicable Coupon Observation Date, we will not pay you the Contingent Coupon applicable to that Coupon Observation Date. You may not receive a Contingent Coupon for one or more Interest Periods during the term of the Notes. For each Interest Period in which the Contingent Coupon is not payable, your payment on

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	the Notes will be limited to the Floating Rate Coupon.
Contingent Coupon Rate:	3% per annum (or 0.75% per quarter)
Maximum Annual Coupon:	3 Month USD LIBOR + 4%, if the Contingent Coupons are payable.
Quarterly Coupon:	The sum of the Floating Rate Coupon and the Contingent Coupon, if payable, for each Interest Period.
Coupon Observation Dates:	Quarterly, on May 10, 2017, August 10, 2017, November 10, 2017, February 12, 2018, May 10, 2018, August 10, 2018, November 12, 2018, February 11, 2019, May 10, 2019, August 12, 2019, November 11, 2019 and the Valuation Date.
Coupon Payment Dates:	The Floating Rate Coupons and any Contingent Coupons will be paid on May 15, 2017, August 15, 2017, November 15, 2017, February 15, 2018, May 15, 2018, August 15, 2018, November 15, 2018, February 14, 2019, May 15, 2019, August 15, 2019, November 14, 2019 and the Maturity Date.
Call Feature:	If, on any Call Observation Date, the closing level of each Reference Index is greater than or equal to its Initial Level, then the Notes will be automatically called.
Payment if Called:	If the Notes are automatically called, then, on the applicable Call Settlement Date, for each $1,000 principal amount, in addition to the applicable Floating Rate Coupon, you will receive $1,000 plus the Contingent Coupon that may be otherwise due on that Call Settlement Date.
Call Observation Dates:	Quarterly, on each Coupon Observation Date starting February 12, 2018 and ending on the Valuation Date.
Call Settlement Dates:	If the Notes are called, the applicable payment will be made on the applicable Coupon Payment Date.
Valuation Date:	February 10, 2020
Maturity Date:	February 13, 2020
Initial Level:	2,316.10 with respect to the SPX and 1,388.844 with respect to the RTY, each of which was its closing level on the Trade Date.
Final Level:	For each Reference Index, its closing level on the Valuation Date.
Trigger Level and Coupon Barrier:	1,621.27 with respect to the SPX and 972.191 with respect to the RTY, each of which is 70% of its Initial Level (rounded to two decimal places for the SPX and rounded to three decimal places for the RTY).
Payment at Maturity (if held to maturity):	If the Notes are not called, in addition to the final Floating Rate Coupon, we will pay you at maturity an amount based on the Final Level of the Lesser Performing Reference Index: · If the Final Level of the Lesser Performing Reference Index is greater than or equal to its Trigger Level, we will pay you a cash payment equal to the principal amount plus the Contingent Coupon otherwise due on the Maturity Date. · If the Final Level of the Lesser Performing Reference Index is less than its Trigger Level, you will receive at maturity, for each $1,000 in principal amount, a cash payment equal to: $1,000 + ($1,000 x Underlying Return of the Lesser Performing Reference Index) In such a case, the amount of cash that you receive will be less than your principal amount, if

	anything, resulting in a loss that is proportionate to the decline of the Lesser Performing Reference Index from the Trade Date to the Valuation Date. Even with the Floating Rate Coupons and any Contingent Coupons paid during the term of the Notes, your return on the Notes may be negative. In addition, you will not participate in any increase in the level of either Reference Index.
Lesser Performing Reference Index:	The Reference Index with the lowest Underlying Return.
Underlying Return:	With respect to each Reference Index: $\frac{\text{Final Level} - \text{Initial Level}}{\text{Initial Level}}$
Market Disruption Events:	The occurrence of a market disruption event (or a non-trading day) as to either of the Reference Indices will result in the postponement of a Call Observation Date, Coupon Observation Date, or the Valuation Date as to that Reference Index, but not to any non-affected Reference Index.
Calculation Agent:	RBCCM
U.S. Tax Treatment:	By purchasing a Note, each holder agrees (in the absence of a change in law, an administrative determination or a judicial ruling to the contrary) to treat the Note as a callable pre-paid cash-settled income-bearing derivative contract for U.S. federal income tax purposes. However, the U.S. federal income tax consequences of your investment in the Notes are uncertain and the Internal Revenue Service could assert that the Notes should be taxed in a manner that is different from that described in the preceding sentence. Please see the section below, "Supplemental Discussion of U.S. Federal Income Tax Consequences" which applies to the Notes.
Secondary Market:	RBCCM (or one of its affiliates), though not obligated to do so, may maintain a secondary market in the Notes after the Issue Date. The amount that you may receive upon sale of the Notes prior to maturity may be less than the principal amount.
Listing:	The Notes will not be listed on any securities exchange
Settlement:	DTC global (including through its indirect participants Euroclear and Clearstream, Luxembourg as described under "Description of Debt Securities—Ownership and Book-Entry Issuance" in the prospectus dated January 8, 2016).
Terms Incorporated in the Master Note:	All of the terms appearing above the item captioned "Secondary Market" on the cover page and pages P-2, P-3 and P-4 of this pricing supplement and the terms appearing under the caption "General Terms of the Notes" in the product prospectus supplement.

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ADDITIONAL TERMS OF YOUR NOTES

You should read this pricing supplement together with the prospectus dated January 8, 2016, as supplemented by the prospectus supplement dated January 8, 2016 and the product prospectus supplement dated January 11, 2016, relating to our Senior Global Medium-Term Notes, Series G, of which these Notes are a part. Capitalized terms used but not defined in this pricing supplement will have the meanings given to them in the product prospectus supplement. In the event of any conflict, this pricing supplement will control. The Notes vary from the terms described in the product prospectus supplement in several important ways. You should read this pricing supplement carefully.

This pricing supplement, together with the documents listed below, contains the terms of the Notes and supersedes all prior or contemporaneous oral statements as well as any other written materials including preliminary or indicative pricing terms, correspondence, trade ideas, structures for implementation, sample structures, brochures or other educational materials of ours. You should carefully consider, among other things, the matters set forth in “Risk Factors” in the prospectus supplement dated January 8, 2016 and in the product prospectus supplement dated January 11, 2016, as the Notes involve risks not associated with conventional debt securities. We urge you to consult your investment, legal, tax, accounting and other advisors before you invest in the Notes. You may access these documents on the Securities and Exchange Commission (the “SEC”) website at www.sec.gov as follows (or if that address has changed, by reviewing our filings for the relevant date on the SEC website):

Prospectus dated January 8, 2016:
http://www.sec.gov/Archives/edgar/data/1000275/000121465916008810/j18160424b3.htm

Prospectus Supplement dated January 8, 2016:
http://www.sec.gov/Archives/edgar/data/1000275/000121465916008811/p14150424b3.htm

Product Prospectus Supplement dated January 11, 2016:
https://www.sec.gov/Archives/edgar/data/1000275/000114036116047489/form424b5.htm

Our Central Index Key, or CIK, on the SEC website is 1000275. As used in this pricing supplement, “we,” “us,” or “our” refers to Royal Bank of Canada.

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HYPOTHETICAL EXAMPLES

The examples below illustrate hypothetical Payments at Maturity (excluding the final Floating Rate Coupon) and are based on the following terms:

Hypothetical Initial Level (for each Reference Index):	100.00*
Hypothetical Trigger Level and Coupon Barrier (for each Reference Index):	70.00, which is 70.00% of its hypothetical Initial Level
Floating Rate Coupon:	Quarterly, at an annual rate equal to the sum of 3 Month USD LIBOR plus 2%
Contingent Coupon:	Quarterly, at a rate of 3% per annum (0.75% per quarter)
Coupon Observation Dates and Call Observation Dates:	Quarterly, with (i) the Coupon Observation Dates starting on the first quarter after the Trade Date and (ii) Call Observation Dates starting approximately one year after the Trade Date.
Principal Amount:	$1,000 per Note

* The hypothetical Initial Levels of 100 for each Reference Index used in the examples below has been chosen for illustrative purposes only and does not represent the actual Initial Level of any Reference Index. The actual Initial Level of each Reference Index is set forth on the cover page of this pricing supplement.

Final Level of the Lesser Performing Reference Index	Underlying Return of the Lesser Performing Reference Index	Payment at Maturity (assuming that the Notes were not previously called and excluding the final Floating Rate Coupon)*
200.00	100.00%	$1,007.50
180.00	80.00%	$1,007.50
160.00	60.00%	$1,007.50
140.00	40.00%	$1,007.50
120.00	20.00%	$1,007.50
100.00	0.00%	$1,007.50
80.00	-20.00%	$1,007.50
70.00	-30.00%	$1,007.50
60.00	-40.00%	$600.00
40.00	-60.00%	$400.00
20.00	-80.00%	$200.00
0.00	-100.00%	$0.00

* Including the final Contingent Coupon, if payable. The actual Quarterly Coupon on any Coupon Payment Date will depend upon the closing level of each Reference Index on the applicable Coupon Observation Date and the level of 3 Month USD LIBOR on the applicable Floating Rate Determination Date.

The following examples illustrate how the Payments at Maturity set forth in the table above are calculated:

Example 1: The level of the Lesser Performing Reference Index increases to a Final Level of 150.

Because the Final Level of the Lesser Performing Reference Index is greater than its Trigger Level, an investor will receive at maturity, in addition to the final Contingent Coupon of $7.50, a payment of $1,000 per $1,000 in principal amount of the Notes.

Example 2: The level of the Lesser Performing Reference Index decreases to a Final Level of 90.

Although the Final Level of the Lesser Performing Reference Index is less than its Initial Level, the Final Level is above its Trigger Level and its Coupon Barrier. Therefore, an investor will receive at maturity, in addition to the final Contingent Coupon of $7.50, a payment of $1,000 per $1,000 in principal amount of the Notes.

Example 3: The level of the Lesser Performing Reference Index decreases to a Final Level of 40.
Because the Final Level of the Lesser Performing Reference Index is less than its Trigger Level and its Coupon Barrier, the Contingent Coupon will not be payable for the final Interest Period, and an investor will receive $400.00 per $1,000 in principal amount of the Notes, calculated as follows:
$1,000 + ($1,000 x -60.00%) = $1,000 - $600 = $400.00

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SELECTED RISK CONSIDERATIONS

An investment in the Notes involves significant risks. Investing in the Notes is not equivalent to investing directly in the Reference Indices. These risks are explained in more detail in the section "Risk Factors" beginning in the product prospectus supplement. In addition to the risks described in the prospectus supplement and the product prospectus supplement, you should consider the following:

- Principal at Risk — Investors in the Notes could lose some or a substantial portion of their principal amount if there is a decline in the level of the Lesser Performing Reference Index between the Trade Date and the Valuation Date. If the Notes are not automatically called and the Final Level of the Lesser Performing Reference Index on the Valuation Date is less than its Trigger Level, the amount of cash that you receive at maturity will represent a loss of your principal that is proportionate to the decline in the closing level of the Lesser Performing Reference Index from the Trade Date to the Valuation Date. The Floating Rate Coupons and any Contingent Coupons received on the Notes prior to the maturity date may not be sufficient to compensate for any such loss.
- The Notes Are Subject to an Automatic Call — If on any Call Observation Date, the closing level of each Reference Index is greater than or equal to its Initial Level, then the Notes will be automatically called. If the Notes are automatically called, then, on the applicable Call Settlement Date, for each $1,000 in principal amount, you will receive $1,000 plus the Floating Rate Coupon and the Contingent Coupon otherwise due on that Call Settlement Date. You will not receive any coupon payments after the Call Settlement Date. You may be unable to reinvest your proceeds from the automatic call in an investment with a return that is as high as the return on the Notes would have been if they had not been called.
- You May Not Receive any Contingent Coupons — We will not necessarily make any coupon payments on the Notes. If the closing level of either of the Reference Indices on a Coupon Observation Date is less than its Coupon Barrier, we will not pay you the Contingent Coupon applicable to that Coupon Observation Date. (However, we will pay to you the Floating Rate Coupon no matter how the Reference Indices perform.) If the closing level of either of the Reference Indices is less than its Coupon Barrier on each of the Coupon Observation Dates and on the Valuation Date, we will not pay you any Contingent Coupons during the term of, and you may not receive a positive return on your Notes. This non-payment of the Contingent Coupon may coincide with a period of greater risk of principal loss on your Notes. Accordingly, if we do not pay the Contingent Coupon on the Maturity Date, you will also incur a loss of principal, because the Final Level of the Lesser Performing Reference Index will be less than its Trigger Level.
- The Notes Are Linked to the Lesser Performing Reference Index Even if the Other Reference Index Perform Better — If either of the Reference Indices has a Final Level that is less than its Trigger Level, your return will be linked to the lesser performing of the two Reference Indices. Even if the Final Level of the other Reference Index has increased compared to its Initial Level, or has experienced a decrease that is less than that of the Lesser Performing Reference Index, your return will only be determined by reference to the performance of the Lesser Performing Reference Index, regardless of the performance of the other Reference Index.
- Your Payment on the Notes Will Be Determined by Reference to Each Reference Index Individually, Not to a Basket, and the Payment at Maturity Will Be Based on the Performance of the Lesser Performing Reference Index — The Payment at Maturity will be determined only by reference to the performance of the Lesser Performing Reference Index, regardless of the performance of the other Reference Index. The Notes are not linked to a weighted basket, in which the risk may be mitigated and diversified among each of the basket components. For example, in the case of notes linked to a weighted basket, the return would depend on the weighted aggregate performance of the basket components reflected as the basket return. As a result, the depreciation of one basket component could be mitigated by the appreciation of the other basket component, as scaled by the weighting of that basket component. However, in the case of the Notes, the individual performance of each Reference Index would not be combined, and the

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depreciation of either Reference Index would not be mitigated by any appreciation of the other Reference Index. Instead, your return will depend solely on the Final Level of the Lesser Performing Reference Index.

- The Call Feature and the Floating Rate Coupon and the Contingent Coupon Feature Limit Your Potential Return — The return potential of the Notes is limited to the pre-specified Floating Rate and Contingent Coupon Rate, regardless of the appreciation of the Reference Indices. In addition, the total return on the Notes will vary based on the number of Call Observation Dates and Coupon Observation Dates on which the Contingent Coupon becomes payable prior to maturity or an automatic call. Further, if the Notes are called due to the Call Feature, you will not receive any Floating Rate Coupons, Contingent Coupons or any other payment after the applicable Call Settlement Date. Since the Notes could be called as early as the first Call Observation Date, the total return on the Notes could be limited to one year of Floating Rate Coupons and Contingent Coupons. If the Notes are not called, you may be subject to the full downside performance of the Lesser Performing Reference Index even though your potential return is limited to the Floating Rate and the Contingent Coupon Rate. As a result, the return on an investment in the Notes could be less than the return on a direct investment in securities included in the Reference Indices.
- Reinvestment Risk — If your Notes are redeemed early, the term of the Notes may be as short as approximately one year. You may be unable to reinvest the proceeds from an investment in the Notes at a comparable return for a similar level of risk if the Notes are redeemed prior to the Maturity Date.
- Your Return May Be Lower than the Return on a Conventional Debt Security of Comparable Maturity — The return that you will receive on the Notes, which could be negative, may be less than the return you could earn on other investments. Even if your return is positive, your return may be less than the return you would earn if you bought a conventional senior interest bearing debt security of Royal Bank.
- Payments on the Notes Are Subject to Our Credit Risk, and Changes in Our Credit Ratings Are Expected to Affect the Market Value of the Notes — The Notes are Royal Bank's senior unsecured debt securities. As a result, your receipt of all payments on the Notes is dependent upon Royal Bank's ability to repay its obligations on the applicable payment dates. This will be the case even if the levels of the Reference Indices increase after the Trade Date. No assurance can be given as to what our financial condition will be at any time during the term of the Notes.
- There May Not Be an Active Trading Market for the Notes-Sales in the Secondary Market May Result in Significant Losses — There may be little or no secondary market for the Notes. The Notes will not be listed on any securities exchange. RBCCM and other affiliates of Royal Bank may make a market for the Notes; however, they are not required to do so. RBCCM or any other affiliate of Royal Bank may stop any market-making activities at any time. Even if a secondary market for the Notes develops, it may not provide significant liquidity or trade at prices advantageous to you. We expect that transaction costs in any secondary market would be high. As a result, the difference between bid and asked prices for your Notes in any secondary market could be substantial.
- Owning the Notes Is Not the Same as Owning the Reference Indices — The return on your Notes is unlikely to reflect the return you would realize if you actually owned the securities represented by the Reference Indices. For instance, you will not receive or be entitled to receive any dividend payments or other distributions on those securities during the term of your Notes. As an owner of the Notes, you will not have voting rights or any other rights that holders of the Reference Indices may have. Furthermore, the Reference Indices may appreciate substantially during the term of the Notes, while your potential return will be limited to the applicable Floating Rate Coupon payments and the Contingent Coupon payments.
- The Initial Estimated Value of the Notes Is Less than the Price to the Public — The initial estimated value set forth on the cover page of this pricing supplement does not represent a minimum price at which we, RBCCM or any of our affiliates would be willing to purchase the Notes in any secondary market (if any exists) at any time. If you attempt to sell the Notes prior to maturity, their market value may be lower than the price you paid for them and the initial

estimated value. This is due to, among other things, changes in the levels of the Reference Indices, the borrowing rate we pay to issue securities of this kind, and the inclusion in the price to the public of the underwriting discount and the estimated costs relating to our hedging of the Notes. These factors, together with various credit, market and economic factors over the term of the Notes, are expected to reduce the price at which you may be able to sell the Notes in any secondary market and will affect the value of the Notes in complex and unpredictable ways. Assuming no change in market conditions or any other relevant factors, the price, if any, at which you may be able to sell your Notes prior to maturity may be less than your original purchase price, as any such sale price would not be expected to include the underwriting discount and the hedging costs relating to the Notes. In addition to bid-ask spreads, the value of the Notes determined by RBCCM for any secondary market price is expected to be based on the secondary rate rather than the internal funding rate used to price the Notes and determine the initial estimated value. As a result, the secondary price will be less than if the internal funding rate was used. The Notes are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your Notes to maturity.

- The Initial Estimated Value of the Notes Is an Estimate Only, Calculated as of the Time the Terms of the Notes Were Set — The initial estimated value of the Notes is based on the value of our obligation to make the payments on the Notes, together with the mid-market value of the derivative embedded in the terms of the Notes. See "Structuring the Notes" below. Our estimate is based on a variety of assumptions, including our credit spreads, expectations as to dividends, interest rates and volatility, and the expected term of the Notes. These assumptions are based on certain forecasts about future events, which may prove to be incorrect. Other entities may value the Notes or similar securities at a price that is significantly different than we do.

The value of the Notes at any time after the Trade Date will vary based on many factors, including changes in market conditions, and cannot be predicted with accuracy. As a result, the actual value you would receive if you sold the Notes in any secondary market, if any, should be expected to differ materially from the initial estimated value of your Notes.

- Inconsistent Research — Royal Bank or its affiliates may issue research reports on securities that are, or may become, components of the Reference Indices. We may also publish research from time to time on financial markets and other matters that may influence the levels of the Reference Indices or the value of the Notes, or express opinions or provide recommendations that may be inconsistent with purchasing or holding the Notes or with the investment view implicit in the Notes or the Reference Indices. You should make your own independent investigation of the merits of investing in the Notes and the Reference Indices.
- Market Disruption Events and Adjustments — The Payment at Maturity, each Call Observation Date, each Coupon Payment Date and the Valuation Date are subject to adjustment as described in the product prospectus supplement. For a description of what constitutes a market disruption event as well as the consequences of that market disruption event, see "General Terms of the Notes—Market Disruption Events" in the product prospectus supplement.

Auto-Callable Floating Rate and Contingent Coupon Barrier Notes Linked to the Lesser Performing of Two Equity Indices, Due February 13, 2020

INFORMATION REGARDING THE REFERENCE INDICES

All disclosures contained in this pricing supplement regarding the Reference Indices, including, without limitation, their make-up, method of calculation, and changes in their components, have been derived from publicly available sources. The information reflects the policies of, and is subject to change by, the applicable index sponsor. Each of these sponsors has no obligation to continue to publish, and may discontinue publication of, the applicable Reference Index. The consequences of an index sponsor discontinuing publication of a Reference Index are discussed in the section of the product prospectus supplement entitled "General Terms of the Notes—Unavailability of the Level of a Reference Index." Neither we nor RBCCM accepts any responsibility for the calculation, maintenance or publication of any Reference Index or any successor index.

We obtained the information regarding the historical performance of each Reference Index set forth below from Bloomberg Financial Markets.

We have not independently verified the accuracy or completeness of the information obtained from Bloomberg Financial Markets. The historical performance of the Reference Indices should not be taken as an indication of their future performance, and no assurance can be given as to the levels of the Reference Indices on any Call Observation Date, Coupon Observation Date or on the Valuation Date. We cannot give you assurance that the performance of the Reference Indices will not result in the loss of all or part of your investment.

Auto-Callable Floating Rate and Contingent Coupon Barrier Notes Linked to the Lesser Performing of Two Equity Indices, Due February 13, 2020

S&P 500® Index ("SPX")

The SPX

The SPX is intended to provide an indication of the pattern of common stock price movement. The calculation of the level of the SPX is based on the relative value of the aggregate market value of the common stocks of 500 companies as of a particular time compared to the aggregate average market value of the common stocks of 500 similar companies during the base period of the years 1941 through 1943.

S&P Dow Jones Indices LLC chooses companies for inclusion in the SPX with the aim of achieving a distribution by broad industry groupings that approximates the distribution of these groupings in the common stock population of its Stock Guide Database of over 10,000 companies, which S&P Dow Jones Indices LLC uses as an assumed model for the composition of the total market. Relevant criteria employed by S&P Dow Jones Indices LLC include the viability of the particular company, the extent to which that company represents the industry group to which it is assigned, the extent to which the market price of that company's common stock generally is responsive to changes in the affairs of the respective industry, and the market value and trading activity of the common stock of that company.

S&P Dow Jones Indices LLC calculates the SPX by reference to the prices of the constituent stocks of the SPX without taking account of the value of dividends paid on those stocks. As a result, the return on the Notes will not reflect the return you would realize if you actually owned the SPX constituent stocks and received the dividends paid on those stocks.

Effective with the September 2015 rebalance, consolidated share class lines will no longer be included in the S&P 500® Index. Each share class line will be subject to public float and liquidity criteria individually, but the company's total market capitalization will be used to evaluate each share class line. This may result in one listed share class line of a company being included in the S&P 500® Index while a second listed share class line of the same company is excluded.

Computation of the SPX

While S&P Dow Jones Indices LLC currently employs the following methodology to calculate the SPX, no assurance can be given that S&P Dow Jones Indices LLC will not modify or change this methodology in a manner that may affect the Payment at Maturity.

Historically, the market value of any component stock of the SPX was calculated as the product of the market price per share and the number of then outstanding shares of such component stock. In March 2005, S&P Dow Jones Indices LLC began shifting the SPX halfway from a market capitalization weighted formula to a float-adjusted formula, before moving the SPX to full float adjustment on September 16, 2005. S&P Dow Jones Indices LLC's criteria for selecting stocks for the SPX did not change with the shift to float adjustment. However, the adjustment affects each company's weight in the SPX.

Under float adjustment, the share counts used in calculating the SPX reflect only those shares that are available to investors, not all of a company's outstanding shares. Float adjustment excludes shares that are closely held by control groups, other publicly traded companies or government agencies.

In September 2012, all shareholdings representing more than 5% of a stock's outstanding shares, other than holdings by "block owners," were removed from the float for purposes of calculating the SPX. Generally, these "control holders" will include officers and directors, private equity, venture capital and special equity firms, other publicly traded companies that hold shares for control, strategic partners, holders of restricted shares, ESOPs, employee and family trusts, foundations associated with the company, holders of unlisted share classes of stock, government entities at all levels (other than government retirement/pension funds) and any individual person who controls a 5% or greater stake in a company as reported in regulatory filings. However, holdings by block owners, such as depositary banks, pension funds, mutual funds and ETF providers, 401(k) plans of the company, government retirement/pension funds, investment funds of insurance

companies, asset managers and investment funds, independent foundations and savings and investment plans, will ordinarily be considered part of the float.

Treasury stock, stock options, restricted shares, equity participation units, warrants, preferred stock, convertible stock, and rights are not part of the float. Shares held in a trust to allow investors in countries outside the country of domicile, such as depositary shares and Canadian exchangeable shares are normally part of the float unless those shares form a control block. If a company has multiple classes of stock outstanding, shares in an unlisted or non-traded class are treated as a control block.

For each stock, an investable weight factor ("IWF") is calculated by dividing the available float shares by the total shares outstanding. As of September 21, 2012, available float shares are defined as the total shares outstanding less shares held by control holders. This calculation is subject to a 5% minimum threshold for control blocks. For example, if a company's officers and directors hold 3% of the company's shares, and no other control group holds 5% of the company's shares, S&P Dow Jones Indices LLC would assign that company an IWF of 1.00, as no control group meets the 5% threshold. However, if a company's officers and directors hold 3% of the company's shares and another control group holds 20% of the company's shares, S&P Dow Jones Indices LLC would assign an IWF of 0.77, reflecting the fact that 23% of the company's outstanding shares are considered to be held for control. For companies with multiple classes of stock, S&P Dow Jones Indices LLC calculates the weighted average IWF for each stock using the proportion of the total company market capitalization of each share class as weights.

The SPX is calculated using a base-weighted aggregate methodology. The level of the SPX reflects the total market value of all 500 component stocks relative to the base period of the years 1941 through 1943. An indexed number is used to represent the results of this calculation in order to make the level easier to use and track over time. The actual total market value of the component stocks during the base period of the years 1941 through 1943 has been set to an indexed level of 10. This is often indicated by the notation 1941-43 = 10. In practice, the daily calculation of the SPX is computed by dividing the total market value of the component stocks by the "index divisor." By itself, the index divisor is an arbitrary number. However, in the context of the calculation of the SPX, it serves as a link to the original base period level of the SPX. The index divisor keeps the SPX comparable over time and is the manipulation point for all adjustments to the SPX, which is index maintenance.

Index Maintenance

Index maintenance includes monitoring and completing the adjustments for company additions and deletions, share changes, stock splits, stock dividends, and stock price adjustments due to company restructuring or spinoffs. Some corporate actions, such as stock splits and stock dividends, require changes in the common shares outstanding and the stock prices of the companies in the SPX, and do not require index divisor adjustments.

To prevent the level of the SPX from changing due to corporate actions, corporate actions which affect the total market value of the SPX require an index divisor adjustment. By adjusting the index divisor for the change in market value, the level of the SPX remains constant and does not reflect the corporate actions of individual companies in the SPX. Index divisor adjustments are made after the close of trading and after the calculation of the SPX closing level.

Changes in a company's shares outstanding of 5.00% or more due to mergers, acquisitions, public offerings, tender offers, Dutch auctions, or exchange offers are made as soon as reasonably possible. All other changes of 5.00% or more (due to, for example, company stock repurchases, private placements, redemptions, exercise of options, warrants, conversion of preferred stock, notes, debt, equity participation units, at the market offerings, or other recapitalizations) are made weekly and are announced on Fridays for implementation after the close of trading on the following Friday. Changes of less than 5.00% due to a company's acquisition of another company in the SPX are made as soon as reasonably possible. All other changes of less than 5.00% are accumulated and made quarterly on the third Friday of March, June, September, and December, and are usually announced two to five days prior.

Changes in IWFs of more than five percentage points caused by corporate actions (such as merger and acquisition activity, restructurings, or spinoffs) will be made as soon as reasonably possible. Other changes in IWFs will be made annually when IWFs are reviewed.

License Agreement

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The Notes are not sponsored, endorsed, sold or promoted by S&P Dow Jones Indices LLC, Dow Jones, S&P or any of their respective affiliates (collectively, "S&P Dow Jones Indices"). S&P Dow Jones Indices make no representation or warranty, express or implied, to the holders of the Notes or any member of the public regarding the advisability of investing in securities generally or in the Notes particularly or the ability of the SPX to track general market performance. S&P Dow Jones Indices' only relationship to us with respect to the SPX is the licensing of the SPX and certain trademarks, service marks and/or trade names of S&P Dow Jones Indices and/or its third party licensors. The SPX is determined, composed and calculated by S&P Dow Jones Indices without regard to us or the Notes. S&P Dow Jones Indices have no obligation to take our needs or the needs of holders of the Notes into consideration in determining, composing or calculating the SPX. S&P Dow Jones Indices are not responsible for and have not participated in the determination of the prices, and amount of the Notes or the timing of the issuance or sale of the Notes or in the determination or calculation of the equation by which the Notes are to be converted into cash. S&P Dow Jones Indices have no obligation or liability in connection with the administration, marketing or trading of the Notes. There is no assurance that investment products based on the SPX will accurately track index performance or provide positive investment returns. S&P Dow Jones Indices LLC and its subsidiaries are not investment advisors. Inclusion of a security or futures contract within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security or futures contract, nor is it considered to be investment advice. Notwithstanding the foregoing, CME Group Inc. and its affiliates may independently issue and/or sponsor financial products unrelated to the Notes currently being issued by us, but which may be similar to and competitive with the Notes. In addition, CME Group Inc. and its affiliates may trade financial products which are linked to the performance of the SPX. It is possible that this trading activity will affect the value of the Notes.

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Auto-Callable Floating Rate and Contingent Coupon Barrier Notes Linked to the Lesser Performing of Two Equity Indices, Due February 13, 2020

Historical Information

Below is a table setting forth the intra-day high, intra-day low and period-end closing levels of this Reference Index. The information provided in the table is for the period from January 1, 2009 to February 10, 2017.

Period-Start Date	Period-End Date	High Intra-Day Level of the Reference Index	Low Intra-Day Level of the Reference Index	Period-End Closing Level of the Reference Index
1/1/2009	3/31/2009	943.85	666.79	797.87
4/1/2009	6/30/2009	956.23	783.32	919.32
7/1/2009	9/30/2009	1,080.15	869.32	1,057.08
10/1/2009	12/31/2009	1,130.38	1,019.95	1,115.10
1/1/2010	3/31/2010	1,180.69	1,044.50	1,169.43
4/1/2010	6/30/2010	1,219.80	1,028.33	1,030.71
7/1/2010	9/30/2010	1,157.16	1,010.91	1,141.20
10/1/2010	12/31/2010	1,262.60	1,131.87	1,257.64
1/1/2011	3/31/2011	1,344.07	1,249.05	1,325.83
4/1/2011	6/30/2011	1,370.58	1,258.07	1,320.64
7/1/2011	9/30/2011	1,356.48	1,101.54	1,131.42
10/1/2011	12/31/2011	1,292.66	1,074.77	1,257.60
1/1/2012	3/31/2012	1,419.15	1,258.86	1,408.47
4/1/2012	6/30/2012	1,422.38	1,266.74	1,362.16
7/1/2012	9/30/2012	1,474.51	1,325.41	1,440.67
10/1/2012	12/31/2012	1,470.96	1,343.35	1,426.19
1/1/2013	3/31/2013	1,570.28	1,426.19	1,569.19
4/1/2013	6/30/2013	1,687.18	1,536.03	1,606.28
7/1/2013	9/30/2013	1,729.86	1,604.57	1,681.55
10/1/2013	12/31/2013	1,849.44	1,646.47	1,848.36
1/1/2014	3/31/2014	1,883.97	1,737.92	1,872.34
4/1/2014	6/30/2014	1,968.17	1,814.36	1,960.23
7/1/2014	9/30/2014	2,019.26	1,904.78	1,972.29
10/1/2014	12/31/2014	2,093.55	1,820.66	2,058.90
1/1/2015	3/31/2015	2,119.59	1,980.90	2,067.89
4/1/2015	6/30/2015	2,134.72	2,048.38	2,063.11
7/1/2015	9/30/2015	2,132.82	1,867.01	1,920.03
10/1/2015	12/31/2015	2,116.48	1,893.70	2,043.94
1/1/2016	3/31/2016	2,072.21	1,810.10	2,059.74
4/1/2016	6/30/2016	2,120.55	1,991.68	2,098.86
7/1/2016	9/30/2016	2,193.81	2,074.02	2,168.27
10/1/2016	12/31/2016	2,277.53	2,083.79	2,238.83
1/1/2017	2/10/2017	2,319.23	2,245.13	2,316.10

PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS.

Auto-Callable Floating Rate and Contingent
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The graph below illustrates the performance of the S&P 500® Index from January 1, 2009 to February 10, 2017, based on the Initial Level of 2,316.10, which was the closing level of this Reference Index on February 10, 2017. The red line represents the Coupon Barrier and Trigger Level of 1,621.27, which is equal to 70.00% of the Initial Level (rounded to two decimal places).

Auto-Callable Floating Rate and Contingent Coupon Barrier Notes Linked to the Lesser Performing of Two Equity Indices, Due February 13, 2020

Russell 2000® Index ("RTY")

The RTY

The RTY was developed by Russell Investments ("Russell") before FTSE International Limited and Russell combined in 2015 to create FTSE Russell, which is wholly owned by London Stock Exchange Group. Russell began dissemination of the RTY (Bloomberg L.P. index symbol "RTY") on January 1, 1984. FTSE Russell calculates and publishes the RTY. The RTY was set to 135 as of the close of business on December 31, 1986. The RTY is designed to track the performance of the small capitalization segment of the U.S. equity market. As a subset of the Russell 3000® Index, the RTY consists of the smallest 2,000 companies included in the Russell 3000® Index. The Russell 3000® Index measures the performance of the largest 3,000 U.S. companies, representing approximately 98% of the investable U.S. equity market. The RTY is determined, comprised, and calculated by FTSE Russell without regard to the Notes.

Selection of Stocks Underlying the RTY

All companies eligible for inclusion in the RTY must be classified as a U.S. company under FTSE Russell's country-assignment methodology. If a company is incorporated, has a stated headquarters location, and trades in the same country (American Depositary Receipts and American Depositary Shares are not eligible), then the company is assigned to its country of incorporation. If any of the three factors are not the same, FTSE Russell defines three Home Country Indicators ("HCIs"): country of incorporation, country of headquarters, and country of the most liquid exchange (as defined by a two-year average daily dollar trading volume) ("ADDTV") from all exchanges within a country. Using the HCIs, FTSE Russell compares the primary location of the company's assets with the three HCIs. If the primary location of its assets matches any of the HCIs, then the company is assigned to the primary location of its assets. If there is insufficient information to determine the country in which the company's assets are primarily located, FTSE Russell will use the primary country from which the company's revenues are primarily derived for the comparison with the three HCIs in a similar manner. FTSE Russell uses the average of two years of assets or revenues data to reduce potential turnover. If conclusive country details cannot be derived from assets or revenues data, FTSE Russell will assign the company to the country of its headquarters, which is defined as the address of the company's principal executive offices, unless that country is a Benefit Driven Incorporation "BDI" country, in which case the company will be assigned to the country of its most liquid stock exchange. BDI countries include: Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bermuda, Bonaire, British Virgin Islands, Cayman Islands, Channel Islands, Cook Islands, Curacao, Faroe Islands, Gibraltar, Guernsey, Isle of Man, Jersey, Liberia, Marshall Islands, Panama, Saba, Sint Eustatius, Sint Maarten, and Turks and Caicos Islands. For any companies incorporated or headquartered in a U.S. territory, including countries such as Puerto Rico, Guam, and U.S. Virgin Islands, a U.S. HCI is assigned.

All securities eligible for inclusion in the RTY must trade on a major U.S. exchange. Stocks must have a closing price at or above $1.00 on their primary exchange on the last trading day in May to be eligible for inclusion during annual reconstitution. However, in order to reduce unnecessary turnover, if an existing member's closing price is less than $1.00 on the last day of May, it will be considered eligible if the average of the daily closing prices (from its primary exchange) during the month of May is equal to or greater than $1.00. Initial public offerings are added each quarter and must have a closing price at or above $1.00 on the last day of their eligibility period in order to qualify for index inclusion. If an existing stock does not trade on the "rank day" (typically the last trading day in May but a confirmed timetable is announced each spring) in May, but does have a closing price at or above $1.00 on another eligible U.S. exchange, that stock will be eligible for inclusion.

An important criterion used to determine the list of securities eligible for the RTY is total market capitalization, which is defined as the market price as of the rank day in May for those securities being considered at annual reconstitution times the total number of shares outstanding. Where applicable, common stock, non-restricted exchangeable shares and partnership units/membership interests are used to determine market capitalization. Any other form of shares such as preferred stock, convertible preferred stock, redeemable shares, participating preferred stock, warrants, rights, installment receipts or trust receipts, are excluded from the calculation. If multiple share classes of common stock exist, they are combined to determine total shares outstanding. In cases where the common stock share classes act independently of each other (e.g., tracking stocks), each class is considered for inclusion separately. If multiple share classes exist, the pricing vehicle will be designated as the share class with the highest two-year trading volume as of the rank day in May.

Companies with a total market capitalization of less than $30 million are not eligible for the RTY. Similarly, companies with only 5% or less of their shares available in the marketplace are not eligible for the RTY. Royalty trusts, limited liability companies, closed-end investment companies (companies that are required to report Acquired Fund Fees and Expenses, as defined by the SEC, including business development companies), blank check companies, special purpose acquisition companies, and limited partnerships are also ineligible for inclusion. Exchange traded funds and mutual funds are also excluded. Bulletin board, pink sheets, and over-the-counter ("OTC") traded securities are not eligible for inclusion.

Annual reconstitution is a process by which the RTY is completely rebuilt. Based on closing levels of the company's common stock on its primary exchange on the rank day of May of each year, FTSE Russell reconstitutes the composition of the RTY using the then existing market capitalizations of eligible companies. Reconstitution of the RTY occurs on the last Friday in June or, when the last Friday in June is the 29th or 30th, reconstitution occurs on the prior Friday. In addition, FTSE Russell adds initial public offerings to the RTY on a quarterly basis based on total market capitalization ranking within the market-adjusted capitalization breaks established during the most recent reconstitution.

After membership is determined, a security's shares are adjusted to include only those shares available to the public. This is often referred to as "free float." The purpose of the adjustment is to exclude from market calculations the capitalization that is not available for purchase and is not part of the investable opportunity set.

License Agreement

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Auto-Callable Floating Rate and Contingent
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Historical Information

Below is a table setting forth the intra-day high, intra-day low and period-end closing levels of this Reference Index. The information provided in the table is for the period from January 1, 2009 to February 10, 2017.

Period-Start Date	Period-End Date	High Intra-Day Level of the Reference Index	Low Intra-Day Level of the Reference Index	Period-End Closing Level of the Reference Index
1/1/2009	3/31/2009	519.180	342.570	422.748
4/1/2009	6/30/2009	535.850	412.770	508.281
7/1/2009	9/30/2009	625.310	473.540	604.278
10/1/2009	12/31/2009	635.990	553.320	625.389
1/1/2010	3/31/2010	693.320	580.490	678.643
4/1/2010	6/30/2010	745.950	607.300	609.486
7/1/2010	9/30/2010	678.900	587.600	676.139
10/1/2010	12/31/2010	793.280	669.430	783.647
1/1/2011	3/31/2011	843.730	771.710	843.549
4/1/2011	6/30/2011	868.570	772.620	827.429
7/1/2011	9/30/2011	860.370	634.710	644.156
10/1/2011	12/31/2011	769.460	601.710	740.916
1/1/2012	3/31/2012	847.920	736.780	830.301
4/1/2012	6/30/2012	841.060	729.750	798.487
7/1/2012	9/30/2012	868.500	765.050	837.450
10/1/2012	12/31/2012	853.570	763.550	849.350
1/1/2013	3/31/2013	954.000	849.330	951.542
4/1/2013	6/30/2013	1,008.230	898.400	977.475
7/1/2013	9/30/2013	1,082.000	981.300	1,073.786
10/1/2013	12/31/2013	1,167.960	1,037.860	1,163.637
1/1/2014	3/31/2014	1,212.823	1,082.717	1,173.038
4/1/2014	6/30/2014	1,193.964	1,082.531	1,192.964
7/1/2014	9/30/2014	1,213.550	1,101.675	1,101.676
10/1/2014	12/31/2014	1,221.442	1,040.472	1,204.696
1/1/2015	3/31/2015	1,268.162	1,151.295	1,252.772
4/1/2015	6/30/2015	1,295.996	1,211.126	1,253.947
7/1/2015	9/30/2015	1,275.899	1,078.633	1,100.688
10/1/2015	12/31/2015	1,205.079	1,080.606	1,135.889
1/1/2016	3/31/2016	1,134.078	943.097	1,114.028
4/1/2016	6/24/2016	1,190.172	1,085.883	1,151.923
7/1/2016	9/30/2016	1,263.460	1,131.713	1,251.646
10/1/2016	12/31/2016	1,392.714	1,156.085	1,357.130
1/1/2017	2/10/2017	1,391.178	1,341.464	1,388.844

PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS.

The graph below illustrates the performance of the Russell 2000® Index from January 1, 2009 to February 10, 2017, based on the Initial Level of 1,388.844, which was the closing level of this Reference Index on February 10, 2017. The red line represents the Coupon Barrier and Trigger Level of 972.191, which is equal to 70.00% of the Initial Level (rounded to three decimal places).

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HISTORICAL INFORMATION OF 3 MONTH USD LIBOR

Historically, the 3 Month USD LIBOR has experienced significant fluctuations. Any historical upward or downward trend in the level of the 3 Month USD LIBOR during any period shown below is not an indication that the Floating Rate is more or less likely to increase or decrease at any time during the term of the Notes.

The 3 Month USD LIBOR was 1.03622% on February 10, 2017. The graph below sets forth the historical performance of the 3 Month USD LIBOR from January 1, 2009 through February 10, 2017.

Source: Bloomberg L.P.

PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS

Auto-Callable Floating Rate and Contingent
Coupon Barrier Notes Linked to the Lesser
Performing of Two Equity Indices, Due February
13, 2020

SUPPLEMENTAL DISCUSSION OF U.S. FEDERAL INCOME TAX CONSEQUENCES

The following is a general description of the material U.S. tax considerations relating to the Notes. It does not purport to be a complete analysis of all tax considerations relating to the Notes. Prospective purchasers of the Notes should consult their tax advisors as to the consequences under the tax laws of the country of which they are resident for tax purposes and the tax laws of the U.S. of acquiring, holding and disposing of the Notes and receiving payments under the Notes. This summary is based upon the law as in effect on the date of this document and is subject to any change in law that may take effect after such date.

The following section supplements the discussion of U.S. federal income taxation in the accompanying prospectus and prospectus supplement and it supersedes the discussion of U.S. federal income taxation in the accompanying product prospectus supplement. It applies only to those holders who are not excluded from the discussion of U.S. federal income taxation in the accompanying prospectus. This discussion applies only to U.S. holders and non-U.S. holders that will purchase the Notes upon original issuance and will hold the Notes as capital assets for U.S. federal income tax purposes. In addition, the discussion below assumes that an investor in the Notes will be subject to a significant risk that it will lose a significant amount of its investment in the Notes.

You should consult your tax advisor concerning the U.S. federal income tax and other tax consequences of your investment in the Notes in your particular circumstances, including the application of state, local or other tax laws and the possible effects of changes in federal or other tax laws.

NO STATUTORY, JUDICIAL OR ADMINISTRATIVE AUTHORITY DIRECTLY DISCUSSES HOW THE NOTES SHOULD BE TREATED FOR U.S. FEDERAL INCOME TAX PURPOSES. AS A RESULT, THE U.S. FEDERAL INCOME TAX CONSEQUENCES OF AN INVESTMENT IN THE NOTES ARE UNCERTAIN. BECAUSE OF THE UNCERTAINTY, YOU SHOULD CONSULT YOUR TAX ADVISOR IN DETERMINING THE U.S. FEDERAL INCOME TAX AND OTHER TAX CONSEQUENCES OF YOUR INVESTMENT IN THE NOTES, INCLUDING THE APPLICATION OF STATE, LOCAL OR OTHER TAX LAWS AND THE POSSIBLE EFFECTS OF CHANGES IN FEDERAL OR OTHER TAX LAWS.

We will not attempt to ascertain whether any of the entities whose stock is included in a Reference Index would be treated as a “passive foreign investment company” within the meaning of Section 1297 of the Internal Revenue Code or a “U.S. real property holding corporation” within the meaning of Section 897 of the Internal Revenue Code. If any of the entities whose stock is included in a Reference Index were so treated, certain adverse U.S. federal income tax consequences could possibly apply to a holder. You should refer to any available information filed with the SEC and other authorities by the entities whose stock is included in a Reference Index and consult your tax advisor regarding the possible consequences to you in this regard, if any.

In the opinion of our counsel, Morrison & Foerster LLP, it would generally be reasonable to treat a note with terms described in this document as a callable pre-paid cash-settled income-bearing derivative contract for U.S. federal income tax purposes, and the terms of the Notes require a holder and us (in the absence of a change in law or an administrative or judicial ruling to the contrary) to treat the Notes for all tax purposes in accordance with such characterization. In addition, we intend to treat the quarterly coupons as U.S. source income for U.S. federal income tax purposes. The following discussion assumes that the treatment described in this paragraph is proper and will be respected.

Although the U.S. federal income tax treatment of the quarterly coupon is uncertain, we intend to take the position, and the following discussion assumes, that such quarterly coupon (including any quarterly coupon paid on or with respect to the maturity date) constitutes taxable ordinary income to a U.S. holder at the time received or accrued in accordance with the holder’s regular method of tax accounting. If the Notes are so treated, a U.S. holder should generally recognize capital gain or loss upon the sale or maturity of the Notes in an amount equal to the difference between the cash amount a holder

receives at such time (other than amounts properly attributable to any quarterly coupon, which would be taxed, as described above, as ordinary income) and the holder's tax basis in the Notes. In general, a U.S. holder's tax basis in the Notes will be equal to the price the holder paid for the Notes. Capital gain recognized by an individual U.S. holder is generally taxed at ordinary income rates where the property is held for one year or less. The ordinary income treatment of the quarterly coupons, in conjunction with the capital loss treatment of any loss recognized upon the sale, exchange or maturity of the Notes, could result in adverse tax consequences to a holder because the deductibility of capital losses is subject to limitations.

Alternative Treatments. Alternative tax treatments of the Notes are also possible and the Internal Revenue Service might assert that a treatment other than that described above is more appropriate. For example, it is possible to treat the Notes, and the Internal Revenue Service might assert that the Notes should be treated, as a single debt instrument. Because the Notes have a term that exceeds one year, such a debt instrument would be subject to the special tax rules governing contingent payment debt instruments. If the Notes are so treated, a holder would generally be required to accrue interest income over the term of the Notes based upon the yield at which we would issue a non-contingent fixed-rate debt instrument with terms and conditions similar to the Notes. In addition, any gain a holder might recognize upon the sale or maturity of the Notes would be ordinary income and any loss recognized by a holder at such time would generally be ordinary loss to the extent of interest that same holder included in income in the current or previous taxable years in respect of the Notes, and thereafter, would be capital loss.

Because of the absence of authority regarding the appropriate tax characterization of the Notes, it is also possible that the Internal Revenue Service could seek to characterize the Notes in a manner that results in other tax consequences that are different from those described above. For example, the Internal Revenue Service could possibly assert that any gain or loss that a holder may recognize upon the sale or maturity of the Notes should be treated as ordinary gain or loss.

The Internal Revenue Service has released a notice that may affect the taxation of holders of "prepaid forward contracts" and similar instruments. According to the notice, the Internal Revenue Service and the U.S. Treasury Department are actively considering whether the holder of such instruments should be required to accrue ordinary income on a current basis. While it is not clear whether the Notes would be viewed as similar to such instruments, it is possible that any future guidance could materially and adversely affect the tax consequences of an investment in the Notes, possibly with retroactive effect. The Internal Revenue Service and the U.S. Treasury Department are also considering other relevant issues, including whether additional gain or loss from such instruments should be treated as ordinary or capital and whether the special "constructive ownership rules" of Section 1260 of the Code, which generally operate to recharacterize certain long-term capital gains as ordinary income and impose an interest charge, might be applied to such instruments. Holders are urged to consult their tax advisors concerning the significance, and the potential impact, of the above considerations.

Backup Withholding and Information Reporting. Payments made with respect to the Notes and proceeds from the sale or exchange of the Notes may be subject to a backup withholding tax unless, in general, the holder complies with certain procedures or is an exempt recipient. Any amounts so withheld generally will be refunded by the Internal Revenue Service or allowed as a credit against the holder's U.S. federal income tax liability, provided the holder makes a timely filing of an appropriate tax return or refund claim to the Internal Revenue Service.

Reports will be made to the Internal Revenue Service and to holders that are not exempted from the reporting requirements.

Non-U.S. holders. The following discussion applies to non-U.S. holders of the Notes. A non-U.S. holder is a beneficial owner of a Note that, for U.S. federal income tax purposes, is a non-resident alien individual, a foreign corporation, or a foreign estate or trust.

While the U.S. federal income tax treatment of the Notes (including proper characterization of the quarterly coupons for U.S. federal income tax purposes) is uncertain, U.S. federal income tax at a 30% rate (or at a lower rate under an applicable income tax treaty) will be withheld in respect of the quarterly coupons paid to a non-U.S. holder unless such payments are effectively connected with the conduct by the non-U.S. holder of a trade or business in the U.S. (in which case, to avoid withholding, the non-U.S. holder will be required to provide a Form W-8ECI). We will not pay any additional amounts in respect of such withholding. To claim benefits under an income tax treaty, a non-U.S. holder must obtain a taxpayer identification number and certify as to its eligibility under the appropriate treaty's limitations on benefits article, if applicable (which certification may generally be made on a Form W-8BEN or W-8BEN-E, or a substitute or successor form). In addition, special rules may apply to claims for treaty benefits made by corporate non-U.S. holders. A non-U.S. holder that is eligible for a reduced rate of U.S. federal withholding tax pursuant to an income tax treaty may obtain a refund of any excess amounts withheld by filing an appropriate claim for refund with the Internal Revenue Service. The availability of a lower rate of withholding or an exemption from withholding under an applicable income tax treaty will depend on the proper characterization of the quarterly coupons under U.S. federal income tax laws and whether such treaty rate or exemption applies to such quarterly coupon payments. No assurance can be provided on the proper characterization of the quarterly coupons for U.S. federal income tax purposes and, accordingly, no assurance can be provided on the availability of benefits under any income tax treaty. Non-U.S. holders should consult their tax advisors in this regard.

Except as discussed below, a non-U.S. holder will generally not be subject to U.S. federal income or withholding tax on any gain (not including, for the avoidance of doubt, any amounts properly attributable to any quarterly coupon which would be subject to the rules discussed in the previous paragraph) upon the sale or maturity of the Notes, provided that (i) the holder complies with any applicable certification requirements (which certification may generally be made on a Form W-8BEN or W-8BEN-E, or a substitute or successor form), (ii) the payment is not effectively connected with the conduct by the holder of a U.S. trade or business, and (iii) if the holder is a non-resident alien individual, such holder is not present in the U.S. for 183 days or more during the taxable year of the call, sale or maturity of the Notes. In the case of (ii) above, the holder generally would be subject to U.S. federal income tax with respect to any income or gain in the same manner as if the holder were a U.S. holder and, in the case of a holder that is a corporation, the holder may also be subject to a branch profits tax equal to 30% (or such lower rate provided by an applicable U.S. income tax treaty) of a portion of its earnings and profits for the taxable year that are effectively connected with its conduct of a trade or business in the U.S., subject to certain adjustments. Payments made to a non-U.S. holder may be subject to information reporting and to backup withholding unless the holder complies with applicable certification and identification requirements as to its foreign status.

A "dividend equivalent" payment is treated as a dividend from sources within the United States and such payments generally would be subject to a 30% U.S. withholding tax if paid to a non-U.S. holder. Under U.S. Treasury Department regulations, payments (including deemed payments) with respect to equity-linked instruments ("ELIs") that are "specified ELIs" may be treated as dividend equivalents if such specified ELIs reference an interest in an "underlying security," which is generally any interest in an entity taxable as a corporation for U.S. federal income tax purposes if a payment with respect to such interest could give rise to a U.S. source dividend. However, the IRS has issued guidance that states that the U.S. Treasury Department and the IRS intend to amend the effective dates of the U.S. Treasury Department regulations to provide that withholding on dividend equivalent payments will not apply to specified ELIs that are not delta-

one instruments and that are issued before January 1, 2018. Based on our determination that the Notes are not delta-one instruments, , non-U.S. holders should not be subject to withholding on dividend equivalent payments, if any, under the Notes. However, it is possible that the Notes could be treated as deemed reissued for U.S. federal income tax purposes upon the occurrence of certain events affecting the Reference Index or the Notes (for example, upon a Reference Index rebalancing), and following such occurrence the Notes could be treated as subject to withholding on dividend equivalent payments. Non-U.S. holders that enter, or have entered, into other transactions in respect of the Reference Index or the Notes should consult their tax advisors as to the application of the dividend equivalent withholding tax in the context of the Notes and their other transactions. If any payments are treated as dividend equivalents subject to withholding, we (or the applicable paying agent) would be entitled to withhold taxes without being required to pay any additional amounts with respect to amounts so withheld.

As discussed above, alternative characterizations of the Notes for U.S. federal income tax purposes are possible. Should an alternative characterization, by reason of change or clarification of the law, by regulation or otherwise, cause payments as to the Notes to become subject to withholding tax in addition to the withholding tax described above, we will withhold tax at the applicable statutory rate. The Internal Revenue Service has also indicated that it is considering whether income in respect of instruments such as the Notes should be subject to withholding tax. We will not be required to pay any additional amounts in respect of such withholding. Prospective investors should consult their own tax advisors in this regard.

Foreign Account Tax Compliance Act. The Foreign Account Tax Compliance Act (“FATCA”), imposes a 30% U.S. withholding tax on certain U.S. source payments of interest (and OID), dividends, or other fixed or determinable annual or periodical gain, profits, and income, and on the gross proceeds from a disposition of property (including payments at maturity, or upon a redemption or sale) of a type which can produce U.S. source interest or dividends (“withholdable payments”), if paid to a foreign financial institution (including amounts paid to a foreign financial institution on your behalf) unless such institution enters into an agreement with the U.S. Treasury Department to collect and provide to the U.S. Treasury Department certain information regarding U.S. account holders, including certain account holders that are foreign entities with U.S. owners, with such institution or otherwise complies with FATCA. In addition, the Notes may constitute a “financial account” for these purposes and thus, be subject to information reporting requirements pursuant to FATCA. The legislation also generally imposes a withholding tax of 30% on withholdable payments made to a non-financial foreign entity, unless that entity provides the withholding agent with a certification that it does not have any substantial U.S. owners or a certification identifying the direct and indirect substantial U.S. owners of the entity.

The U.S. Treasury Department and the IRS have announced that withholding on payments of gross proceeds from a sale or redemption of the Notes will only apply to payments made after December 31, 2018. We will not pay additional amounts with respect to any FATCA withholding. Therefore, if such withholding applies, any payments on the Notes will be significantly less than what you would have otherwise received. Depending on your circumstances, these amounts withheld may be creditable or refundable to you. Foreign financial institutions and non-financial foreign entities located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules. You are urged to consult with your own tax advisor regarding the possible implications of FATCA on your investment in the Notes.

SUPPLEMENTAL PLAN OF DISTRIBUTION (CONFLICTS OF INTEREST)

Delivery of the Notes will be made against payment for the Notes on February 14, 2017, which is the third (3rd) business day following the trade date (this settlement cycle being referred to as "T+3"). See "Plan of Distribution" in the prospectus dated January 8, 2016. For additional information as to the relationship between us and RBCCM, please see the section "Plan of Distribution—Conflicts of Interest" in the prospectus dated January 8, 2016.

The value of the Notes shown on your account statement may be based on RBCCM's estimate of the value of the Notes if RBCCM or another of our affiliates were to make a market in the Notes (which it is not obligated to do). That estimate will be based upon the price that RBCCM may pay for the Notes in light of then prevailing market conditions, our creditworthiness and transaction costs. For a period of approximately three months after the issue date of the Notes, the value of the Notes that may be shown on your account statement may be higher than RBCCM's estimated value of the Notes at that time. This is because the estimated value of the Notes will not include the underwriting discount and our hedging costs and profits; however, the value of the Notes shown on your account statement during that period may be a higher amount, reflecting the addition of RBCCM's underwriting discount and our estimated costs and profits from hedging the Notes. This excess is expected to decrease over time until the end of this period. After this period, if RBCCM repurchases your Notes, it expects to do so at prices that reflect their estimated value.

STRUCTURING THE NOTES

The Notes are our debt securities, the return on which is linked to the performance of the Reference Indices. As is the case for all of our debt securities, including our structured notes, the economic terms of the Notes reflect our actual or perceived creditworthiness at the time of pricing. In addition, because structured notes result in increased operational, funding and liability management costs to us, we typically borrow the funds under these Notes at a rate that is more favorable to us than the rate that we might pay for a conventional fixed or floating rate debt security of comparable maturity. Using this relatively lower implied borrowing rate rather than the secondary market rate, is a factor that reduced the initial estimated value of the Notes at the time their terms were set. Unlike the estimated value included in this pricing supplement, any value of the Notes determined for purposes of a secondary market transaction may be based on a different funding rate, which may result in a lower value for the Notes than if our initial internal funding rate were used.

In order to satisfy our payment obligations under the Notes, we may choose to enter into certain hedging arrangements (which may include call options, put options or other derivatives) on the issue date with RBCCM or one of our other subsidiaries. The terms of these hedging arrangements take into account a number of factors, including our creditworthiness, interest rate movements, the volatility of the Reference Indices, and the tenor of the Notes. The economic terms of the Notes and their initial estimated value depend in part on the terms of these hedging arrangements.

The lower implied borrowing rate is a factor that reduced the economic terms of the Notes to you. The initial offering price of the Notes also reflects the underwriting commission and our estimated hedging costs. These factors resulted in the initial estimated value for the Notes on the trade date being less than their public offering price. See "Selected Risk Considerations—The Initial Estimated Value of the Notes Is Less than the Price to the Public" above.

VALIDITY OF THE NOTES

In the opinion of Norton Rose Fulbright Canada LLP, the issue and sale of the Notes has been duly authorized by all necessary corporate action of the Bank in conformity with the Indenture, and when the Notes have been duly executed, authenticated and issued in accordance with the Indenture and delivered against payment therefor, the Notes will be validly issued and, to the extent validity of the Notes is a matter governed by the laws of the Province of Ontario or Québec, or the laws of Canada applicable therein, and will be valid obligations of the Bank, subject to equitable remedies which may only be granted at the discretion of a court of competent authority, subject to applicable bankruptcy, to rights to indemnity and contribution under the Notes or the Indenture which may be limited by applicable law; to insolvency and other laws of general application affecting creditors' rights, to limitations under applicable limitations statutes, and to limitations as to the currency in which judgments in Canada may be rendered, as prescribed by the Currency Act (Canada). This opinion is given as of the date hereof and is limited to the laws of the Provinces of Ontario and Québec and the federal laws of Canada applicable thereto. In addition, this opinion is subject to customary assumptions about the Trustee's authorization, execution and delivery of the Indenture and the genuineness of signatures and certain factual matters, all as stated in the letter of such counsel dated January 8, 2016, which has been filed as Exhibit 5.1 to Royal Bank's Form 6-K filed with the SEC dated January 8, 2016.

In the opinion of Morrison & Foerster LLP, when the Notes have been duly completed in accordance with the Indenture and issued and sold as contemplated by the prospectus supplement and the prospectus, the Notes will be valid, binding and enforceable obligations of Royal Bank, entitled to the benefits of the Indenture, subject to applicable bankruptcy, insolvency and similar laws affecting creditors' rights generally, concepts of reasonableness and equitable principles of general applicability (including, without limitation, concepts of good faith, fair dealing and the lack of bad faith). This opinion is given as of the date hereof and is limited to the laws of the State of New York. This opinion is subject to customary assumptions about the Trustee's authorization, execution and delivery of the Indenture and the genuineness of signatures and to such counsel's reliance on the Bank and other sources as to certain factual matters, all as stated in the legal opinion dated January 8, 2016, which has been filed as Exhibit 5.2 to the Bank's Form 6-K dated January 8, 2016.