ROYAL BANK OF CANADA
Form 424B2
April 18, 2019

RBC Capital Markets®

Filed Pursuant to Rule 424(b)(2)
Registration Statement No. 333-227001

Pricing Supplement
Dated April 16, 2019
To the Product
Prospectus Supplement
No. CCBN-1 Dated
September 10, 2018, the
Prospectus Supplement
Dated September 7, 2018
and the Prospectus Dated
September 7, 2018

$2,000,000
Issuer Callable Contingent Coupon Barrier Notes
Linked to the Common Stock of Microsoft
Corporation, Due April 21, 2021
Royal Bank of Canada

Royal Bank of Canada is offering Issuer Callable Contingent Coupon Barrier Notes (the "Notes") linked to the common stock (the "Reference Stock") of Microsoft Corporation (the "Reference Stock Issuer"). The Notes offered are senior unsecured obligations of Royal Bank of Canada, will pay a quarterly Contingent Coupon at the rate and under the circumstances specified below, and will have the terms described in the documents described above, as supplemented or modified by this pricing supplement.

The Notes do not guarantee any return of principal at maturity. Any 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 September 10, 2018, on page S-1 of the prospectus supplement dated September 7, 2018, 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. The Notes are not subject to conversion into our common shares under subsection 39.2(2.3) of the Canada Deposit Insurance Corporation Act.

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	Stock Exchange Listing:	None
Trade Date:	April 16, 2019	Principal Amount:	$1,000 per Note
Issue Date:	April 22, 2019	Maturity Date:	April 21, 2021
Observation Dates:	Quarterly, as set forth below	Coupon Payment Dates:	Quarterly, as set forth below
Valuation Date:	April 16, 2021	Contingent Coupon Rate:	9.65% per annum
Initial Stock Price:	$120.77, which was the closing price of the Reference Stock on the Trade Date.		
Final Stock Price:	The closing price of the Reference Stock on the Valuation Date.		
Trigger Price and Coupon Barrier:	$96.62, which is 80.00% of the Initial Stock Price (rounded to two decimal places).		
Contingent Coupon:	If the closing price of the Reference Stock is greater than or equal to the Coupon Barrier on the applicable Observation Date, we will pay the Contingent Coupon applicable to that 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 previously called, we will pay you at maturity an amount based on the Final Stock Price: For each $1,000 in principal amount, $1,000 plus the Contingent Coupon at maturity, unless the Final Stock Price is less than the Trigger Price. If the Final Stock Price is less than the Trigger Price, then the investor will receive at maturity, for each $1,000 in principal amount, the number of shares of the Reference Stock equal to the Physical Delivery Amount, or at our election, the cash value of those shares. Investors in the Notes will lose some or all of their principal amount if the Final Stock Price of the Reference Stock is less than the Trigger Price.
Physical Delivery Amount:	For each $1,000 principal amount, a number of shares of the Reference Stock equal to the principal amount divided by the Initial Stock Price, subject to adjustment as described in the product prospectus supplement.
Call Feature:	The Notes may be called at our discretion on any Coupon Payment Date (other than the final Coupon Payment Date), if we send prior written notice, as described below.
CUSIP:	78013GGJ8

	Per Note	Total
Price to public[(1)]	100.00%	$2,000,000.00
Underwriting discounts and commissions[(1)]	1.00%	$20,000.00
Proceeds to Royal Bank of Canada	99.00%	$1,980,000.00

[(1)] Certain dealers who purchased the Notes for sale to certain fee-based advisory accounts may have foregone 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 $990.00 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 $982.89 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 $10.00 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 $10.00 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)” below.

RBC Capital Markets, LLC

Issuer Callable Contingent Coupon Barrier Notes
Linked to the Common Stock of Microsoft
Corporation

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 Issuer Callable Contingent Coupon Barrier Notes (the "Notes") linked to the common stock of Microsoft Corporation (the "Reference Stock").
Issuer:	Royal Bank of Canada ("Royal Bank")
Trade Date:	April 16, 2019
Issue Date:	April 22, 2019
Valuation Date:	April 16, 2021
Maturity Date:	April 21, 2021
Denominations:	Minimum denomination of $1,000, and integral multiples of $1,000 thereafter.
Designated Currency:	U.S. Dollars
Contingent Coupon:	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 price of the Reference Stock is greater than or equal to the Coupon Barrier on the applicable Observation Date, we will pay the Contingent Coupon applicable to that Observation Date. • If the closing price of the Reference Stock is less than the Coupon Barrier on the applicable Observation Date, we will not pay you the Contingent Coupon applicable to that Observation Date. You may not receive a Contingent Coupon for one or more quarterly periods during the term of the Notes.
Contingent Coupon Rate:	9.65% per annum (2.4125% per quarter).
Observation Dates:	Quarterly on July 16, 2019, October 16, 2019, January 16, 2020, April 16, 2020, July 16, 2020, October 16, 2020, January 19, 2021 and the Valuation Date.
Coupon Payment Dates:	The Contingent Coupon, if applicable, will be paid quarterly on July 19, 2019, October 21, 2019, January 22, 2020, April 21, 2020, July 21, 2020, October 21, 2020, January 22, 2021 and the Maturity Date.
Record Dates:	The record date for each Coupon Payment Date will be one business day prior to that scheduled Coupon Payment Date; provided, however, that any Contingent Coupon payable at maturity or upon a call will be payable to the person to whom the payment at maturity or upon the call, as the case may be, will be payable.
Call Feature:	The Notes may be called at our discretion on any Coupon Payment Date (other than the final Coupon Payment Date), if we send written notice to the trustee at least three business days prior to that Coupon Payment Date.
Payment if Called:	If the Notes are called, then, on the applicable Coupon Payment Date, for each $1,000 principal amount, you will receive $1,000 plus the Contingent Coupon otherwise due on that Coupon Payment Date.
Initial Stock Price:	The closing price of the Reference Stock on the Trade Date, as specified on the cover page of this pricing supplement.
Final Stock Price:	The closing price of the Reference Stock on the Valuation Date.
	80.00% of the Initial Stock Price, as specified on the cover page of this pricing supplement.

Trigger Price and
Coupon
Barrier:

Issuer Callable Contingent Coupon Barrier Notes
Linked to the Common Stock of Microsoft
Corporation

Payment at Maturity (if not previously called and held to maturity):	If the Notes are not previously called, we will pay you at maturity an amount based on the Final Stock Price of the Reference Stock: • If the Final Stock Price is greater than or equal to the Trigger Price, 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 Stock Price is below the Trigger Price, you will receive at maturity, for each $1,000 in principal amount, the number of shares of the Reference Stock equal to the Physical Delivery Amount, or at our election, the Cash Delivery Amount. If we elect to deliver shares of the Reference Stock, fractional shares will be paid in cash. The value of the cash or shares that you receive will be less than your principal amount, if anything, resulting in a loss that is proportionate to the decline of the Reference Stock from the Trade Date to the Valuation Date. Investors in the Notes will lose some or all of their principal amount if the Final Stock Price of the Reference Stock is less than the Trigger Price.
Physical Delivery Amount:	For each $1,000 in principal amount, a number of shares of the Reference Stock equal to the principal amount divided by the Initial Stock Price, subject to adjustment as described in the product prospectus supplement. If this number is not a round number, then the number of shares of the Reference Stock to be delivered will be rounded down and the fractional part shall be paid in cash.
Cash Delivery Amount:	The product of the Physical Delivery Amount multiplied by the Final Stock Price.
Market Disruption Events:	The occurrence of a market disruption event (or a non-trading day) as to the Reference Stock will result in the postponement of an Observation Date or the Valuation Date, as described in the product prospectus supplement.
Calculation Agent:	RBC Capital Markets, LLC (“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 Notes as a callable pre-paid contingent income-bearing derivative contract linked to the Reference Stock 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,” and the discussion (including the opinion of our counsel Morrison & Foerster LLP) in the product prospectus supplement dated September 7, 2018 under “Supplemental Discussion of U.S. Federal Income Tax Consequences,” which apply 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 your 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 September 7, 2018).
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 and P-3 of this pricing supplement and the terms appearing under the caption “General Terms of the Notes” in the product prospectus supplement dated September 7, 2018, as modified by this pricing supplement.

P-3 RBC Capital Markets, LLC

Issuer Callable Contingent Coupon Barrier Notes
Linked to the Common Stock of Microsoft
Corporation

ADDITIONAL TERMS OF YOUR NOTES

You should read this pricing supplement together with the prospectus dated September 7, 2018, as supplemented by the prospectus supplement dated September 7, 2018 and the product prospectus supplement dated September 10, 2018, relating to our Senior Global Medium Term Notes, Series H, 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 September 7, 2018 and in the product prospectus supplement dated September 10, 2018, 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 September 7, 2018:
https://www.sec.gov/Archives/edgar/data/1000275/000121465918005973/l96181424b3.htm
Prospectus Supplement dated September 7, 2018:
https://www.sec.gov/Archives/edgar/data/1000275/000121465918005975/f97180424b3.htm
Product Prospectus Supplement dated September 10, 2018:
https://www.sec.gov/Archives/edgar/data/1000275/000114036118038091/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.

Issuer Callable Contingent Coupon Barrier Notes
Linked to the Common Stock of Microsoft
Corporation

HYPOTHETICAL EXAMPLES

The table set out below is included for illustration purposes only. The table illustrates the Payment at Maturity of the Notes (including the final Contingent Coupon, if payable) for a hypothetical range of performance for the Reference Stock, assuming the following terms and that the Notes are not called prior to maturity:

Hypothetical Initial Stock Price:	$100.00*
Hypothetical Trigger Price and Coupon Barrier:	$80.00, which is 80.00% of the hypothetical Initial Stock Price
Contingent Coupon Rate:	9.65% per annum (or 2.4125% per quarter)
Contingent Coupon Amount:	$24.125 per quarter
Observation Dates:	Quarterly
Principal Amount:	$1,000 per Note

* The hypothetical Initial Stock Price of $100 used in the examples below has been chosen for illustrative purposes only and does not represent the actual Initial Stock Price. The actual Initial Stock Price is set forth on the cover page of this pricing supplement.

Hypothetical Final Stock Price of the Reference Stock	Percentage Change of the Reference Stock	Payment at Maturity (assuming that the Notes were not previously called)*	Physical Delivery Amount as Number of Shares of the Reference Stock	Cash Delivery Amount
$150.00	50.00%	$1,024.125*	n/a	n/a
$140.00	40.00%	$1,024.125*	n/a	n/a
$130.00	30.00%	$1,024.125*	n/a	n/a
$125.00	25.00%	$1,024.125*	n/a	n/a
$110.00	10.00%	$1,024.125*	n/a	n/a
$100.00	0.00%	$1,024.125*	n/a	n/a
$90.00	-10.00%	$1,024.125*	n/a	n/a
$80.00	-20.00%	$1,024.125*	n/a	n/a
$79.99	-20.01%	Physical or Cash Delivery Amount	10	$799.90
$70.00	-30.00%	Physical or Cash Delivery Amount	10	$700.00
$65.00	-35.00%	Physical or Cash Delivery Amount	10	$650.00
$60.00	-40.00%	Physical or Cash Delivery Amount	10	$600.00
$50.00	-50.00%	Physical or Cash Delivery Amount	10	$500.00
$40.00	-60.00%	Physical or Cash Delivery	10	$400.00

		Amount		
$30.00	-70.00%	Physical or Cash Delivery Amount	10	$300.00
$20.00	-80.00%	Physical or Cash Delivery Amount	10	$200.00
$10.00	-90.00%	Physical or Cash Delivery Amount	10	$100.00
$0.00	-100.00%	Physical or Cash Delivery Amount	10	$0.00

*Including the final Contingent Coupon, if payable.

Issuer Callable Contingent Coupon Barrier Notes
Linked to the Common Stock of Microsoft
Corporation

Hypothetical Examples of Amounts Payable at Maturity

The following hypothetical examples illustrate how the payments at maturity set forth in the table above are calculated, assuming the Notes have not been called.

Example 1: The price of the Reference Stock increases by 25% from the Initial Stock Price of $100.00 to the Final Stock Price of $125.00. Because the Final Stock Price is greater than the Trigger Price and its Coupon Barrier, the investor receives at maturity, in addition to the final Contingent Coupon otherwise due on the Notes, a cash payment of $1,000 per Note, despite the 25% appreciation in the price of the Reference Stock.

Example 2: The price of the Reference Stock decreases by 10% from the Initial Stock Price of $100.00 to the Final Stock Price of $90.00. Because the Final Stock Price is greater than the Trigger Price and its Coupon Barrier, the investor receives at maturity, in addition to the final Contingent Coupon otherwise due on the Notes, a cash payment of $1,000 per Note, despite the 10% decline in the price of the Reference Stock.

Example 3: The price of the Reference Stock decreases by 50% from the Initial Stock Price of $100.00 to the Final Stock Price of $50.00. Because the Final Stock Price is less than the Trigger Price and its Coupon Barrier, the final Contingent Coupon will not be payable on the Maturity Date, and the investor receives 10 shares of the Reference Stock at maturity, or at our option, the Cash Delivery Amount, calculated as follows:

Physical Delivery Amount x Final Stock Price = 10 x $50.00 = $500.00

* * *

The Payments at Maturity shown above are entirely hypothetical; they are based on theoretical prices of the Reference Stock that may not be achieved on the Valuation Date and on assumptions that may prove to be erroneous. The actual market value of your Notes on the Maturity Date or at any other time, including any time you may wish to sell your Notes, may bear little relation to the hypothetical Payments at Maturity shown above, and those amounts should not be viewed as an indication of the financial return on an investment in the Notes.

Issuer Callable Contingent Coupon Barrier Notes
Linked to the Common Stock of Microsoft
Corporation

SELECTED RISK CONSIDERATIONS

An investment in the Notes involves significant risks. Investing in the Notes is not equivalent to investing directly in the Reference Stock. These risks are explained in more detail in the section "Risk Factors" 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 all or a substantial portion of their principal amount if there is a decline in the trading price of the Reference Stock between the Trade Date and the Valuation Date. If the Notes are not called and the Final Stock Price on the Valuation Date is less than the Trigger Price, the value of the shares or cash that you receive at maturity will represent a loss of your principal that is proportionate to the decline in the closing price of the Reference Stock from the Trade Date to the Valuation Date. If you receive shares of the Reference Stock, their value could decrease between the Valuation Date and the Maturity Date. 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 Issuer Call — We may call the Notes at our discretion on any Coupon Payment Date, other than the final Coupon Payment Date. If the Notes are called, then, on the applicable Coupon Payment Date, for each $1,000 in principal amount, you will receive $1,000 plus the Contingent Coupon otherwise due on the applicable Coupon Payment Date. You will not receive any Contingent Coupons after that payment. You may be unable to reinvest your proceeds from the 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 price of the Reference Stock on an Observation Date is less than the Coupon Barrier, we will not pay you the Contingent Coupon applicable to that Observation Date. If the closing price of the Reference Stock is less than the Coupon Barrier on each of the Observation Dates and on the Valuation Date, we will not pay you any Contingent Coupons during the term of, and you will not receive a positive return on, your Notes. Generally, this non-payment of the Contingent Coupon coincides 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 Stock Price will be less than the Trigger Price.
- The Call Feature and the Contingent Coupon Feature Limit Your Potential Return — The return potential of the Notes is limited to the pre-specified Contingent Coupon Rate, regardless of the appreciation of the Reference Stock. In addition, the total return on the Notes will vary based on the number of Observation Dates on which the Contingent Coupon becomes payable prior to maturity or an issuer call. Further, if the Notes are called due to the Call Feature, you will not receive any Contingent Coupons or any other payment in respect of any Observation Dates after the applicable Coupon Payment Date. Since the Notes could be called as early as the first Coupon Payment Date, the total return on the Notes could be minimal. If the Notes are not called, you may be subject to the full downside performance of the Reference Stock even though your potential return is limited to 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 the Reference Stock.
- 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 our senior unsecured debt securities. As a result, your receipt of any Contingent Coupons, if payable, and the amount due on any relevant payment date is dependent upon our ability to repay its obligations on the applicable payment dates. This will be the case even if the price of the Reference Stock

increases after the Trade Date. No assurance can be given as to what our financial condition will be 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 our other affiliates may make a market for the Notes; however, they are not required to do so. RBCCM or any other affiliate of ours 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 Stock — The return on your Notes is unlikely to reflect the return you would realize if you actually owned the Reference Stock. For instance, you will not receive or be entitled to receive any dividend payments or other distributions on the Reference Stock 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 Stock may have. Furthermore, the Reference

Issuer Callable Contingent Coupon Barrier Notes
Linked to the Common Stock of Microsoft
Corporation

Stock may appreciate substantially during the term of the Notes, while your potential return will be limited to the applicable Contingent Coupon payments.

- There Is No Affiliation Between the Reference Stock Issuer and RBCCM, and RBCCM Is Not Responsible for any Disclosure by the Reference Stock Issuer — We are not affiliated with the Reference Stock Issuer. However, we and our affiliates may currently, or from time to time in the future engage, in business with the Reference Stock Issuer. Nevertheless, neither we nor our affiliates assume any responsibilities for the accuracy or the completeness of any information that any other company prepares. You, as an investor in the Notes, should make your own investigation into the Reference Stock. The Reference Stock Issuer is not involved in this offering and has no obligation of any sort with respect to your Notes. The Reference Stock Issuer has no obligation to take your interests into consideration for any reason, including when taking any corporate actions that might affect the value of your Notes.
- Our Business Activities May Create Conflicts of Interest — We and our affiliates expect to engage in trading activities related to the Reference Stock that are not for the account of holders of the Notes or on their behalf. These trading activities may present a conflict between the holders' interests in the Notes and the interests we and our affiliates will have in their proprietary accounts, in facilitating transactions, including options and other derivatives transactions, for their customers and in accounts under their management. These trading activities, if they influence the prices of the Reference Stock, could be adverse to the interests of the holders of the Notes. We and one or more of our affiliates may, at present or in the future, engage in business with the Reference Stock Issuer, including making loans to or providing advisory services. These services could include investment banking and merger and acquisition advisory services. These activities may present a conflict between our or one or more of our affiliates' obligations and your interests as a holder of the Notes. Moreover, we and our affiliates may have published, and in the future expect to publish, research reports with respect to the Reference Stock. This research is modified from time to time without notice and may express opinions or provide recommendations that are inconsistent with purchasing or holding the Notes. Any of these activities by us or one or more of our affiliates may affect the price of the Reference Stock, and, therefore, the market value of the Notes.
- 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 price of the Reference Stock, 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 on the Cover Page 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.

- Market Disruption Events and Adjustments – The payment at maturity, each Observation 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.

Issuer Callable Contingent Coupon Barrier Notes
Linked to the Common Stock of Microsoft
Corporation

INFORMATION REGARDING THE REFERENCE STOCK ISSUER

The Reference Stock is registered under the Securities Exchange Act of 1934 (the "Exchange Act"). Companies with securities registered under that Act are required to file periodically certain financial and other information specified by the SEC. Information provided to or filed with the SEC can obtained through the SEC's website at www.sec.gov. In addition, information regarding the Reference Stock may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents.

The following information regarding the Reference Stock Issuer is derived from publicly available information. We have not independently verified the accuracy or completeness of reports filed by the Reference Stock Issuer with the SEC, information published by it on its website or in any other format, information about it obtained from any other source or the information provided below.

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

Microsoft Corporation ("MSFT")

Microsoft Corporation develops, manufactures, licenses, sells, and supports software products. The company offers operating system software, server application software, business and consumer applications software, software development tools, and Internet and intranet software.

The company's common stock is listed on the Nasdaq Global Select Market under the ticker symbol "MSFT."

Issuer Callable Contingent Coupon Barrier Notes
Linked to the Common Stock of Microsoft
Corporation

Historical Information

The graph below illustrates the performance of the Reference Stock from January 1, 2009 to April 16, 2019, based on the Initial Stock Price of $120.77. The red line represents the Coupon Barrier and Trigger Price of $96.62, which is equal to 80.00% of the Initial Stock Price, rounded to two decimal places.

Issuer Callable Contingent Coupon Barrier Notes
Linked to the Common Stock of Microsoft
Corporation

SUPPLEMENTAL DISCUSSION OF
U.S. FEDERAL INCOME TAX CONSEQUENCES

The following disclosure supplements, and to the extent inconsistent supersedes, the discussion in the product prospectus supplement dated September 7, 2018 under "Supplemental Discussion of U.S. Federal Income Tax Consequences."

Under Section 871(m) of the Code, a "dividend equivalent" payment is treated as a dividend from sources within the United States. 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, 2021. 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 Stock or the Notes, 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 Stock 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 withholding agent) would be entitled to withhold taxes without being required to pay any additional amounts with respect to amounts so withheld.

The accompanying product prospectus supplement notes that FATCA withholding on payments of gross proceeds from a sale or redemption of Notes will only apply to payments made after December 31, 2018. That discussion is modified to reflect regulations proposed by the U.S. Treasury Department in December 2018 indicating an intent to eliminate the requirement under FATCA of withholding on gross proceeds of the disposition of financial instruments. The U.S. Treasury Department has indicated that taxpayers may rely on these proposed regulations pending their finalization. Prospective investors are urged to consult with their own tax advisors regarding the possible implications of FATCA on their investment in the Notes.

SUPPLEMENTAL PLAN OF DISTRIBUTION (CONFLICTS OF INTEREST)

Delivery of the Notes will be made against payment for the Notes on April 22, 2019, 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 September 7, 2018. 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 September 7, 2018.

We will deliver the Notes on a date that is greater than two business days following the Trade Date. Under Rule 15c6-1 of the Exchange Act, trades in the secondary market generally are required to settle in two business days, unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade the Notes more than two business days prior to the original issue date will be required to specify alternative arrangements to prevent a failed settlement.

In the initial offering of the Notes, they will be offered to investors at a purchase price equal to par, except with respect to certain accounts as indicated on the cover page of this document.

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 3 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 initially 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.

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.

Issuer Callable Contingent Coupon Barrier Notes
Linked to the Common Stock of Microsoft
Corporation

STRUCTURING THE NOTES

The Notes are our debt securities, the return on which is linked to the performance of the Reference Stock. 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 Stock, 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 September 7, 2018, which has been filed as Exhibit 5.1 to Royal Bank’s Form 6-K filed with the SEC dated September 7, 2018.

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 September 7, 2018, which has been filed as Exhibit 5.2 to the Bank's Form 6-K dated September 7, 2018.