

ROYAL BANK OF CANADA  
 Form FWP  
 July 10, 2018

Free Writing Prospectus  
 (To the Prospectus dated January 8, 2016, the Prospectus Supplement dated January 8, 2016, and the Product Prospectus Supplement dated January 8, 2016)

Filed Pursuant to Rule 433  
 Registration No.  
 333-208507  
 July 10, 2018

Royal Bank of  
 Canada \$  
 Phoenix Autocallable Notes with Memory Coupon due July 31,  
 2019  
 Linked to the Common Stock of Facebook, Inc.  
 Senior Global Medium-Term Notes, Series G

General

The Notes are designed for investors who wish to receive Contingent Coupons (as defined below) if (i) on any of the Observation Dates (other than the final Observation Date), the closing price of the common stock of Facebook, Inc. (the “Reference Stock”) or (ii) with respect to the final Observation Date, the Final Stock Price (as defined below) is at or above the Coupon Barrier (as defined below). Investors should be willing to forgo fixed interest and dividend payments, in exchange for the opportunity to receive a Contingent Coupon for each Observation Date. Due to the memory feature described below, a Contingent Coupon that is not payable on a Coupon Payment Date may be paid on a subsequent Coupon Payment Date or at maturity.

Investors in the Notes should be willing to accept the risk of losing some or all of their principal and the risk that no Contingent Coupon payment may be made with respect to some or all of the Observation Dates. Contingent Coupon payments should not be viewed as periodic interest payments.

The Notes are subject to automatic call if the closing price of the Reference Stock on any Observation Date (other than the final Observation Date) is at or above the Initial Stock Price. If the Notes are not automatically called and the Final Stock Price is below the Trigger Price (as defined below), investors will be fully exposed to the depreciation in the Reference Stock. Investors in the Notes should be willing to accept this risk of loss. All payments on the Notes are subject to our credit risk.

Senior unsecured obligations of Royal Bank of Canada maturing July 31, 2019.<sup>(a)(b)</sup>

Minimum denominations of \$10,000 and integral multiples of \$1,000 in excess thereof.

The Notes are expected to price on or about July 13, 2018<sup>(b)</sup> (the “trade date”) and are expected to be issued on or about July 18, 2018<sup>(b)</sup> (the “issue date”).

Key Terms Terms used in this free writing prospectus, but not defined herein, shall have the meanings ascribed to them in the product prospectus supplement.

Issuer: Royal Bank of Canada

Reference Stock: The common stock of Facebook, Inc. (Bloomberg symbol: “FB”)

Observation Dates: October 25, 2018, January 24, 2019, April 25, 2019 and July 26, 2019<sup>(a)(b)</sup>

Coupon Payment Dates: Three business days following each Observation Date, except that the final Coupon Payment Date will be the maturity date.

Contingent Coupons and Memory Feature: The Contingent Coupon will be paid on each Coupon Payment Date if (i) the closing price of the Reference Stock on the applicable Observation Date (other than the final Observation Date) or (ii) with respect to the final Observation Date, the Final Stock Price is at or above the Coupon Barrier. If the Contingent Coupon is not payable on any Coupon Payment Date, it will be paid on any later Coupon Payment Date (or at maturity) on which the Contingent Coupon is payable, together with the payment otherwise due on that later date. For the avoidance of doubt, once a previously unpaid Contingent Coupon has been paid on a later Coupon Payment Date, it will not be paid again on a subsequent date. \$25.00 per \$1,000 in principal amount of the Notes, if payable.

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Contingent

Coupon:

Coupon

Barrier: 73.70% of the Initial Stock Price

Call Feature:

If the closing price of the Reference Stock on any Observation Date (other than the final Observation Date) is at or above the Initial Stock Price, the Notes will be automatically called for a cash payment equal to the principal amount plus the applicable Contingent Coupon for the applicable Observation Date, together with any previously unpaid Contingent Coupons.

Call

Settlement

The Coupon Payment Date corresponding to the applicable Observation Date.

Dates:

Trigger Price:

73.70% of the Initial Stock Price

If the Notes are not called and on the final Observation Date:

- the Final Stock Price is at or above the Trigger Price, then you will receive a cash amount equal to the principal amount plus the Contingent Coupon otherwise due on the maturity date and any

Payment at

Maturity:

- the Final Stock Price is below the Trigger Price, then you will receive a cash amount equal to the principal amount x (1 + the Underlying Return). In this case, you will have a loss of principal that is proportionate to the decline in the Final Stock Price from the Initial Stock Price and you will lose some or all of your initial investment.

Underlying

Return:

Final Stock Price - Initial Stock Price

Initial Stock

Price:

Initial Stock Price

The closing price of one share of the Reference Stock on the trade date.

Final Stock

Price:

The arithmetic average of the closing prices of one share of the Reference Stock on each of the Valuation Dates.

Valuation

Dates:

July 22, 2019, July 23, 2019, July 24, 2019, July 25, 2019 and the final Observation Date<sup>(a)(b)</sup>

Maturity Date: July 31, 2019<sup>(a)(b)</sup>

CUSIP/ISIN: 78013XPQ5 / US78013XPQ50

Estimated

Value:

The initial estimated value of the Notes as of the date of this document is \$985.77 per \$1,000 in principal amount, which is less than the price to public. The pricing supplement relating to the Notes will set forth our estimate of the initial value of the Notes as of the trade date, which will not be more than \$20 less than this amount. 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.

<sup>(a)</sup> Subject to postponement if a market disruption event occurs, as described under “General Terms of the Notes—Payment at Maturity” and “—Market Disruption Events” in the product prospectus supplement.

<sup>(b)</sup> Expected. In the event we make any change to the expected trade date and issue date, the Observation Dates, the Valuation Dates and the maturity date will be changed so that the stated term of the Notes remains the same.

Investing in the Notes involves a number of risks. See “Risk Factors” beginning on page PS-5 of the product prospectus supplement, “Risk Factors” beginning on page S-1 of the prospectus supplement and beginning on page 1 of the prospectus and “Selected Risk Considerations” beginning on page FWP-5 of this free writing prospectus.

The Notes will not be listed on any U.S. securities exchange or quotation system. Neither the U.S. Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined that this free writing prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

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.

	Price to Public <sup>1</sup>	Underwriting Commission <sup>2</sup>	Proceeds to Royal Bank of Canada
Per Note \$1,000	\$10		\$990
Total \$	\$		\$

<sup>1</sup> Certain fiduciary accounts purchasing the Notes will pay a purchase price of \$990 per Note, and the placement agents will forgo any fees with respect to sales made to those accounts. The price to the public for all other purchases of the Notes is 100%.

<sup>2</sup> JPMorgan Chase Bank, N.A., J.P. Morgan Securities LLC and their affiliates will act as placement agents for the Notes and will receive a fee from the Issuer that will not exceed \$10 per \$1,000 in principal amount of the Notes, but will forgo any fees for sales to certain fiduciary accounts.

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Royal Bank of Canada has filed a registration statement (including a product prospectus supplement, a prospectus supplement, and a prospectus) with the SEC for the offering to which this free writing prospectus relates. Before you invest, you should read those documents and the other documents relating to this offering that we have filed with the SEC for more complete information about us and this offering. You may obtain these documents without cost by visiting EDGAR on the SEC website at [www.sec.gov](http://www.sec.gov). Alternatively, Royal Bank of Canada, any agent or any dealer participating in this offering will arrange to send you the product prospectus supplement, the prospectus supplement and the prospectus if you so request by calling toll-free at 1-877-688-2301.

You may revoke your offer to purchase the Notes at any time prior to the pricing as described on the cover of this free writing prospectus. We reserve the right to change the terms of, or reject any offer to purchase the Notes prior to their issuance. In the event of any changes to the terms of the Notes, we will notify you and you will be asked to accept such changes in connection with your purchase. You may also choose to reject such changes, in which case we may reject your offer to purchase.

#### ADDITIONAL TERMS OF THE NOTES

You should read this free writing prospectus 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 8, 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 free writing prospectus will have the meanings given to them in the product prospectus supplement. In the event of any conflict, this free writing prospectus will control. You should read this free writing prospectus carefully.

This free writing prospectus, 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 “Risk Factors” in the product prospectus supplement dated January 8, 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](http://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 TP-1 dated January 8, 2016:

<https://www.sec.gov/Archives/edgar/data/1000275/000114036116047446/form424b5.htm>

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

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What Is the Return on the Notes Assuming a Range of Performance for the Reference Stock?

The following table illustrates hypothetical payments on the Notes that could be realized on each Coupon Payment Date or at maturity per \$1,000 in principal amount of the Notes for a range of prices of the Reference Stock. The hypothetical payments and examples set forth below assume an Initial Stock Price of \$100.00, and a Coupon Barrier and Trigger Price of \$73.70, and reflect the Contingent Coupon of \$25.00, if payable. The actual Initial Stock Price, Coupon Barrier and Trigger Price will be determined on the trade date.

The hypothetical payments and examples set forth below are for illustrative purposes only and may not be the actual payments applicable to the Notes. The numbers appearing in the following table and examples have been rounded for ease of analysis. The examples below do not take into account any tax consequences from investing in the Notes.

Reference Stock Price at Observation Date	Reference Stock Percentage Change Observation Date	Payment on Coupon Payment Date or Call Settlement Date (as applicable) <sup>(1)(2)</sup>	Return on the Notes	Final Observation Date		Return on the Notes <sup>(4)</sup>
				Final Stock Price <sup>(3)</sup>	Underlying Return at Final Observation Date	
\$180.00	80.00%	\$1,025.00	2.50%	\$180.00	80.00%	\$1,025.00 2.50%
\$170.00	70.00%	\$1,025.00	2.50%	\$170.00	70.00%	\$1,025.00 2.50%
\$160.00	60.00%	\$1,025.00	2.50%	\$160.00	60.00%	\$1,025.00 2.50%
\$150.00	50.00%	\$1,025.00	2.50%	\$150.00	50.00%	\$1,025.00 2.50%
\$140.00	40.00%	\$1,025.00	2.50%	\$140.00	40.00%	\$1,025.00 2.50%
\$130.00	30.00%	\$1,025.00	2.50%	\$130.00	30.00%	\$1,025.00 2.50%
\$120.00	20.00%	\$1,025.00	2.50%	\$120.00	20.00%	\$1,025.00 2.50%
\$110.00	10.00%	\$1,025.00	2.50%	\$110.00	10.00%	\$1,025.00 2.50%
\$105.00	5.00%	\$1,025.00	2.50%	\$105.00	5.00%	\$1,025.00 2.50%
\$100.00	0.00%	\$1,025.00	2.50%	\$100.00	0.00%	\$1,025.00 2.50%
\$95.00	-5.00%	\$25.00	2.50%	\$95.00	-5.00%	\$1,025.00 2.50%
\$90.00	-10.00%	\$25.00	2.50%	\$90.00	-10.00%	\$1,025.00 2.50%
\$80.00	-20.00%	\$25.00	2.50%	\$80.00	-20.00%	\$1,025.00 2.50%
\$73.70	-26.30%	\$25.00	2.50%	\$73.70	-26.30%	\$1,025.00 2.50%
\$70.00	-30.00%	\$0.00	0.00%	\$70.00	-30.00%	\$700.00 -30.00%
\$60.00	-40.00%	\$0.00	0.00%	\$60.00	-40.00%	\$600.00 -40.00%
\$50.00	-50.00%	\$0.00	0.00%	\$50.00	-50.00%	\$500.00 -50.00%
\$40.00	-60.00%	\$0.00	0.00%	\$40.00	-60.00%	\$400.00 -60.00%
\$30.00	-70.00%	\$0.00	0.00%	\$30.00	-70.00%	\$300.00 -70.00%
\$20.00	-80.00%	\$0.00	0.00%	\$20.00	-80.00%	\$200.00 -80.00%
\$10.00	-90.00%	\$0.00	0.00%	\$10.00	-90.00%	\$100.00 -90.00%
\$0.00	-100.00%	\$0.00	0.00%	\$0.00	-100.00%	\$0.00 -100.00%

<sup>(1)</sup> The Notes will be automatically called if the closing price of one share of the Reference Stock on any Observation Date (other than the final Observation Date) is greater than or equal to the Initial Stock Price.

<sup>(2)</sup> You will receive a Contingent Coupon in connection with an Observation Date (i) if the closing price of one share of the Reference Stock on that Observation Date (other than the final Observation Date) or (ii) with respect to the final Observation Date, the Final Stock Price is greater than or equal to the Coupon Barrier. As set forth above, an unpaid Contingent Coupon may be payable on a subsequent Coupon Payment Date, or at maturity. This column does not reflect any previously unpaid Contingent Coupons that may be payable at on a Coupon Payment Date or at maturity.

<sup>(3)</sup> The Final Stock Price is equal to the arithmetic average of the closing prices of one share of the Reference Stock on each of the Valuation Dates.

<sup>(4)</sup> This column reflects only the return received in respect of the payment on the maturity date. In addition to this payment, if the closing price of the Reference Stock is greater than or equal to the Coupon Barrier (but below the Initial Stock Price) on one or more of the preceding Observation Dates, investors would receive the applicable Contingent Coupons.

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Hypothetical Examples of Amounts Payable at Maturity or upon an Automatic Call

The following examples illustrate how the payments will be calculated.

Example 1: The closing price of the Reference Stock increases from the Initial Stock Price of \$100.00 to \$110.00 on the first Observation Date.

Because the closing price of the Reference Stock on the first Observation Date is above the Initial Stock Price, the Notes are automatically called, and the investor receives a single payment on the first Call Settlement Date of \$1,025.00 per \$1,000 in principal amount of the Notes, reflecting the principal amount plus the Contingent Coupon for the first Observation Date, for a return of 2.50% on the Notes. No further amount will be owed to you under the Notes.

Example 2: The closing price of the Reference Stock decreases from the Initial Stock Price of \$100.00 to \$65.00 on the first Observation Date (below the Coupon Barrier), \$60.00 on the second Observation Date (below the Coupon Barrier), and increases to \$120.00 on the third Observation Date.

The closing price of the Reference Stock on the first and second Observation Dates was below the Initial Stock Price, so the notes were not automatically called; in addition, the first two Contingent Coupons were not payable. Since the closing price of the Reference Stock on the third Observation Date is above the Initial Stock Price, the Notes are automatically called, and the investor receives a payment on the third Call Settlement Date of \$1,075.00 per \$1,000 in principal amount of the Notes, reflecting the principal amount (\$1,000) and the Contingent Coupon for the third Observation Date (\$25), plus the Contingent Coupons that were not payable on the first two Coupon Payment Dates (\$50). An investor's return would be 7.50% on the Notes. No further amount will be owed to you under the Notes.

Example 3: The closing price of the Reference Stock decreases from the Initial Stock Price of \$100.00 to \$60.00 on the first Observation Date (below the Coupon Barrier), \$65.00 on the second Observation Date (below the Coupon Barrier), \$60.00 on the third Observation Date (below the Coupon Barrier) and the Final Stock Price of \$95.00 (above the Coupon Barrier and Trigger Price).

The closing price of the Reference Stock on the first, second and third Observation Dates were below the Initial Stock Price, so the notes were not automatically called; in addition, the first three Contingent Coupons were not payable. Since the Final Stock Price is above the Trigger Price, at maturity, the investor receives a payment of \$1,100.00 per \$1,000 in principal amount of the Notes, reflecting the principal amount (\$1,000) plus the Contingent Coupon for the final Observation Date (\$25), plus the three previously unpaid Contingent Coupon payments (\$75). The investor's return would be 10.00% on the Notes. No further amount will be owed to you under the Notes.

Example 4: The closing price of the Reference Stock decreases from the Initial Stock Price of \$100.00 to \$73.00 on the first Observation Date (below the Coupon Barrier), \$70.00 on the second Observation Date (below the Coupon Barrier), \$65.00 on the third Observation Date (below the Coupon Barrier) and the Final Stock Price is \$60.00 (below the Coupon Barrier and Trigger Price).

In this example, no Contingent Coupons were payable prior to maturity. At maturity, since the Final Stock Price is below the Coupon Barrier and Trigger Price, the investor receives a payment of \$600.00 per \$1,000 in principal amount of the Notes, reflecting the full downside performance of the Reference Stock. The investor would incur a loss of 40% on the Notes. No further amount will be owed to you under the Notes.

#### Selected Purchase Considerations

**Capped Appreciation Potential** — The return potential of the Notes is limited to the Contingent Coupons and you will not participate in any appreciation in the price of the Reference Stock, which may be significant.

**Potential Early Redemption as a Result of Automatic Call Feature** — While the original term of the Notes is just over one year, the Notes will be called before maturity if the closing price of the Reference Stock is at or above the Initial Stock Price on the applicable Observation Date (other than the final Observation Date). In such a case, you will receive the principal amount plus the applicable Contingent Coupon corresponding to that Observation Date, plus any previously unpaid Contingent Coupons with respect to prior Observation Dates.

**Contingent Protection Against Loss** — If the Notes are not automatically called and the Final Stock Price is at or above the Trigger Price, you will be entitled to receive the full principal amount of your Notes at maturity (plus the applicable Contingent Coupon and any previously unpaid Contingent Coupons with respect to prior Observation Dates). If the Notes are not automatically called and the Final Stock Price is less than the Trigger Price, you will lose 1% of the principal amount of your Notes for every 1% that the Final Stock Price is less than the Initial Stock Price. Under these circumstances, you will lose at least 26.30% of your principal amount at maturity and may lose up to your entire principal amount.

#### 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” beginning on page PS-5 of 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 Reference Stock below the Trigger Price and the Notes are not automatically called. You will lose 1% of the principal amount of your Notes for each 1% that the Final Stock Price is less than the Initial Stock Price if the Final Stock Price is less than the Trigger Price.

**Contingent Repayment of Principal Applies Only at Maturity** — You should be willing to hold your Notes to maturity. If you sell your Notes prior to maturity in the secondary market, if any, you may have to sell your Notes at a loss relative to your initial investment even if the price of the Reference Stock is above the Trigger Price.

**You May Not Receive Any Contingent Coupons** — Investors in the Notes will not necessarily receive Contingent Coupons on the Notes. If (i) the closing price of the Reference Stock on an Observation Date (other than the final Observation Date) or (ii) with respect to the final Observation Date, the Final Stock Price, is less than the Coupon Barrier, investors will not receive 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 (other than the final Observation Date) and the Final Stock Price is less than the Coupon Barrier, investors will not receive any Contingent Coupons during the term of the Notes, and will not receive a positive return on the Notes. Contingent Coupon payments should not be viewed as periodic interest payments. Generally, this non-payment of the Contingent Coupon coincides with a period of greater risk of principal loss on the Notes. Notwithstanding the memory feature described above, there can be no assurance that any unpaid Contingent Coupon will become payable during the term of the notes.

**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 one of our conventional senior interest bearing debt securities.

**Reinvestment Risk** — If your Notes are automatically called, the term of the Notes may be as short as approximately three months. There is no guarantee that you would be able to reinvest the proceeds from an investment in the Notes at a comparable return for a similar level of risk if the Notes are automatically called prior to the Maturity Date. In addition, for the avoidance of doubt, the underwriting commission set forth above will not be rebated if the Notes are called prior to maturity.

**Credit of Issuer** — The Notes are our senior unsecured debt securities. As a result, all payments on the Notes are dependent upon our ability to repay our obligations at that time. This will be the case even if the Reference Stock increases after the trade date. No assurance can be given as to what our financial condition will be on any payment date.



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**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 may not reflect the return you would realize if you actually owned the Reference Stock. For instance, as a holder of the Notes, you will not have voting rights, rights to receive cash dividends or other distributions, or any other rights that holders of the Reference Stock would have. Further, you will not participate in any appreciation of the Reference Stock, which could be significant.

**There Is No Affiliation Between Us and the Issuer of the Reference Stock, and We Are Not Responsible for any Disclosure by that Company** — We are not affiliated with the issuer of the Reference Stock. However, we and our affiliates may currently, or from time to time in the future engage in business with the issuer of the Reference Stock. Nevertheless, neither we nor our affiliates assume any responsibilities for the accuracy or the completeness of any information about the Reference Stock that the issuer of the Reference Stock prepares. You, as an investor in the Notes, should make your own investigation into the Reference Stock and the issuer of the Reference Stock. The issuer of the Reference Stock is not involved in this offering and has no obligation of any sort with respect to your Notes. The issuer of the Reference Stock 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.

**Single Stock Risk** — The price of the Reference Stock can rise or fall sharply due to factors specific to the Reference Stock and its issuer, such as stock price volatility, earnings, financial conditions, corporate, industry and regulatory developments, management changes and decisions and other events, as well as general market factors, such as general stock market volatility and levels, interest rates and economic and political conditions. We urge you to review financial and other information filed periodically with the SEC by the issuer of the Reference Stock.

**Many Economic and Market Factors Will Impact the Value of the Notes** — In addition to the price of the Reference Stock on any day, the value of the Notes will be affected by a number of economic and market factors that may either offset or magnify each other, including:

- the expected volatility of the Reference Stock;

- the time to maturity of the Notes;

  - the dividend rate on the Reference Stock;

- interest and yield rates in the market generally;

- a variety of economic, financial, political, regulatory or judicial events; and

- our creditworthiness, including actual or anticipated downgrades in our credit ratings.

**The Estimated Initial Value of the Notes Will Be Less than the Price to the Public** — The estimated initial value that will be set forth in the final pricing supplement for the Notes 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 estimated initial 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 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. 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 Estimated Initial Value of the Notes That We Will Provide in the Final Pricing Supplement Will Be an Estimate Only, Calculated as of the Pricing Date — The value of the Notes at any time after the pricing 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 estimated initial value of your Notes.

Market Disruption Events and Adjustments — Whether the Notes will be called prior to maturity, the payment upon an automatic call or at maturity, the Observation Dates, the Valuation Dates and the Reference Stock are subject to adjustment as described in the product prospectus supplement and this free writing prospectus. For a description of what constitutes a market disruption event as well as the consequences of that market disruption event and the unavailability of the price of the Reference Stock on an Observation Date or Valuation Date, see “Market Disruption Events on a Valuation Date” below, and “General Terms of the Notes—Payment at Maturity” and “—Market Disruption Events” in the product prospectus supplement.

Antidilution Adjustments — For certain corporate events affecting the Reference Stock, the calculation agent may make adjustments to the terms of the Notes. However, the calculation agent will not make such adjustments in response to all events that could affect the Reference Stock. If an event occurs that does not require the calculation agent to make such adjustments, the value of the Notes may be materially and adversely affected. In addition, all determinations and calculations concerning any such adjustments will be made in the sole discretion of the calculation agent, which will be binding on you absent manifest error. You should be aware that the calculation agent may make any such adjustment, determination or calculation in a manner that differs from that discussed in this document or the product prospectus supplement as necessary to achieve an equitable result.

The Business Activities of Royal Bank and Our Affiliates 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 price 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 issuer of the Reference Stock, 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 may affect the price of the Reference Stock and, therefore, the market value of the Notes.

Additionally, we or our affiliates may serve as issuer, agent or underwriter for additional issuances of securities with returns linked or related to changes in the price of the Reference Stock. By introducing competing products into the marketplace in this manner, we could adversely affect the value of the Notes.

We may hedge our obligations under the Notes through certain affiliates, who would expect to make a profit on such hedge. We or our affiliates may adjust these hedges by, among other things, purchasing or selling those assets at any time, including around the time of the valuation dates, which could have an impact on the return of the Notes. Because hedging our obligations entails risk and may be influenced by market forces beyond our or our affiliates’ control, such hedging may result in a profit that is more or less than expected, or it may result in a loss.