

ROYAL BANK OF CANADA  
Form 424B2  
December 11, 2018

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

## Pricing Supplement

Dated December 6, 2018 \$8,892,000

To the Product Absolute Return Barrier Notes Linked to  
Prospectus Supplement a Basket of Two Equity Indices, due December 8, 2021  
ERN-EI-1, Prospectus Royal Bank of Canada  
Supplement and  
Prospectus, Each Dated  
September 7, 2018

Royal Bank of Canada is offering the Absolute Return Barrier Notes (the “Notes”) linked to the performance of an equally weighted basket (the “Basket”) comprised of the MSCI EAFE Index (50%) and the MSCI Emerging Markets Index (50%).

The CUSIP number for the Notes is 78013XTS7. If the Percentage Change of the Basket is positive, the Notes provide a one-for-one positive return, up to a maximum return of 150% of the principal amount. If the Percentage Change is negative, but greater than or equal to -25% (the “Barrier Percentage”), the investor will receive a one-for-one positive return equal to the absolute value of the Percentage Change. However, if the Percentage Change is less than the Barrier Percentage, the Notes are subject to one-for-one loss of the principal amount, and you will lose all or a significant portion of your initial investment. Any payments on the Notes are subject to our credit risk.

Issue Date: December 11, 2018

Maturity Date: December 8, 2021

The Notes do not pay interest. The Notes will not be listed on any securities exchange.

Investing in the Notes involves a number of risks. See “Risk Factors” beginning on page S-1 of the prospectus supplement dated September 7, 2018, “Additional Risk Factors Specific to the Notes” beginning on page PS-4 of the product prospectus supplement dated September 7, 2018, and “Selected Risk Considerations” beginning on page P-6 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 these securities or determined that this pricing supplement is truthful or complete. Any representation to the contrary is a criminal offense.

	<u>Per Note Total</u>
Price to public <sup>(1)</sup>	100.00% \$8,892,000.00
Underwriting discounts and commissions <sup>(1)</sup>	2.50% \$222,300.00
Proceeds to Royal Bank of Canada	97.50% \$8,669,700.00

Certain dealers who purchase the Notes for sale to certain fee-based advisory accounts may forego some or all of (1) their underwriting discount or selling concessions. The public offering price for investors purchasing the Notes in these accounts may be between \$975 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 \$963.18 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 \$25.00 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 \$25.00 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.

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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.

Issuer: Royal Bank of Canada (“Royal Bank”)  
Issue: Senior Global Medium-Term Notes, Series H  
Underwriter: RBC Capital Markets, LLC (“RBCCM”)  
Reference Asset: The Notes are linked to an equally weighted basket (the “Basket”) of two equity indices (each, a “Basket Component,” collectively, the “Basket Components”). The Basket Components and their respective Component Weights are indicated in the table below.  
Currency: U.S. Dollars  
Denominations: \$1,000 and minimum denominations of \$1,000 in excess thereof  
Trade Date (Pricing Date): December 6, 2018  
Issue Date: December 11, 2018  
CUSIP: 78013XTS7  
Valuation Date: December 6, 2021

If the Percentage Change is positive, then the investor will receive, for each \$1,000 in principal amount of the Notes, the lesser of:

1.  $\$1,000 + (\$1,000 \times \text{Percentage Change})$ ; and
2. Maximum Redemption Amount.

Payment at Maturity (if held to maturity): If the Percentage Change is negative but greater than or equal to the Barrier Percentage, then the investor will receive a cash payment equal to absolute value of the Percentage Change, calculated as follows:

$\$1,000 + [-1 \times (\$1,000 \times \text{Percentage Change})]$

If the Percentage Change is less than the Barrier Percentage (that is, the Percentage Change is between -25.01% and -100%), then the investor will receive a cash payment equal to:

$\text{Principal Amount} + [\text{Principal Amount} \times \text{Percentage Change}]$

In this case, the payment on the Notes will be less than the principal amount, and you will lose some or all of the principal amount.

Maximum Redemption Amount: \$1,500 per \$1,000 in principal amount of the Notes.

Barrier Percentage: -25%

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Percentage Change: The Percentage Change, expressed as a percentage and rounded to two decimal places, will be equal to the sum of the Weighted Component Change for each Basket Component. The Weighted Component Change for each Basket Component will be determined as follows:

Initial Level: With respect to each Basket Component, its closing level on the Pricing Date, as provided in the table below.

Final Level: With respect to each Basket Component, its closing level on the Valuation Date.

The Basket:	Basket Component	Bloomberg Ticker	Component Weight	Initial Level*
	MSCI EAFE Index	MXEA	50%	1,758.35
	MSCI Emerging Markets Index	MXEF	50%	978.93

\* The Initial Level for each Basket Component was its closing level on the Pricing Date.

Maturity Date: December 8, 2021, subject to extension for market and other disruptions, as described in the product prospectus supplement.

Principal at Risk: The Notes are NOT principal protected. You will lose some or all of your principal amount at maturity if the Percentage Change of the Basket is less than the Barrier Percentage.

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 pre-paid cash-settled derivative contract in respect of the Basket 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 “Supplemental Discussion of U.S. Federal Income Tax Consequences” below and the discussion (including the opinion of our counsel Morrison & Foerster LLP) in the product prospectus supplement under “Supplemental Discussion of U.S. Federal Income Tax Consequences,” which applies to the Notes. RBCCM (or one of its affiliates), though not obligated to do so, may maintain a

Secondary Market: 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 of your Notes.

Listing: The Notes will not be listed on any securities exchange.

Clearance and 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: All of the terms appearing above the item captioned “Secondary Market” on 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, as modified by

Note: this pricing supplement.

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#### 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 7, 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 “Additional Risk Factors Specific to the Notes” in the product prospectus supplement dated September 7, 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](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 September 7, 2018:

<https://www.sec.gov/Archives/edgar/data/1000275/000121465918005973/196181424b3.htm>

Prospectus Supplement dated September 7, 2018:

<https://www.sec.gov/Archives/edgar/data/1000275/000121465918005975/f97180424b3.htm>

Product Prospectus Supplement ERN-EI-1 dated September 7, 2018:

<https://www.sec.gov/Archives/edgar/data/1000275/000114036118038044/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 RETURNS

The examples set out below are included for illustration purposes only. The hypothetical Percentage Changes of the Basket used to illustrate the calculation of the Payment at Maturity are not estimates or forecasts of the level of any Basket Component on any trading day prior to the Maturity Date. All examples are based on the Maximum Redemption Amount of \$1,500 per \$1,000 in principal amount, and assume that a holder purchased Notes with an aggregate principal amount of \$1,000 and that no market disruption event occurs on the Valuation Date.

Example 1— Calculation of the Payment at Maturity where the Percentage Change is positive.

Percentage Change: 10%

Payment at Maturity:  $\$1,000 + (\$1,000 \times 10\%) = \$1,100$

On a \$1,000 investment, a 10% Percentage Change results in a Payment at Maturity of \$1,100, a 10.00% return on the Notes.

Example 2— Calculation of the Payment at Maturity where the Percentage Change is positive, but exceeds the Maximum Return.

Percentage Change: 60%

Payment at Maturity:  $\$1,000 + (\$1,000 \times 60\%) = \$1,600$ . However, the Maximum Redemption Amount is \$1,500 per \$1,000 in principal amount of the Notes.

On a \$1,000 investment, a 60% Percentage Change results in a Payment at Maturity of \$1,500, a 50.00% return on the Notes.

Example 3— Calculation of the Payment at Maturity where the Percentage Change is negative (but greater than or equal to the Barrier Percentage).

Percentage Change: -15%

Payment at Maturity: On a \$1,000 investment, a -15% Percentage Change results in a Payment at Maturity of \$1,150.00, a 15% return on the Notes.

Example 4— Calculation of the Payment at Maturity where the Percentage Change is less than the Barrier Percentage.

Percentage Change: -40%

Payment at Maturity:  $\$1,000 + [\$1,000 \times -40\%] = \$1,000 - \$400 = \$600$

On a \$1,000 investment, a -40% Percentage Change results in a Payment at Maturity of \$600, a -40% return on the Notes.

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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 any of the securities included in any Basket Component. These risks are explained in more detail in the section “Additional Risk Factors Specific to the Notes,” beginning on page PS-4 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 will lose some or all of their principal amount if the Percentage Change of the Basket is less than the Barrier Percentage. In such a case, you will lose 1% of the principal amount of your Notes for each 1% that the value of the Basket decreases.

**The Notes Do Not Pay Interest and Your Return May Be Lower than the Return on a Conventional Debt Security of Comparable Maturity -** There will be no periodic interest payments on the Notes as there would be on a conventional fixed-rate or floating-rate debt security having the same 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 the Maximum Redemption Amount –** Even if the levels of the Basket Components increase, the return on the Notes is limited to the maximum return specified above. Accordingly, an investment in the Notes could provide a smaller return than an investment linked directly to the performance of the Basket Components.

**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 the amount due on the Maturity Date is dependent upon Royal Bank’s ability to repay its obligations at that time. This will be the case even if the value of the Basket increases after the Trade Date. No assurance can be given as to what our financial condition will be at the maturity 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.

**You Will Not Have Any Rights to the Securities Included in the Basket Components -** As a holder of the Notes, you will not have voting rights or rights to receive cash dividends or other distributions or other rights that holders of securities included in a Basket Component would have. The Final Levels of the Basket Components will not reflect any dividends paid on the securities included in the Basket Components, and accordingly, any positive return on the Notes may be less than the potential positive return on those securities.

**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 value of the Basket, 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 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.

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An Investment in the Notes Is Subject to Risks Relating to Non-U.S. Securities Markets – Because foreign companies or foreign equity securities included in the Basket Components are publicly traded in the applicable foreign countries and are denominated in non-U.S. currencies, an investment in the Notes involves particular risks. For example, the non-U.S. securities markets may be more volatile than the U.S. securities markets, and market developments may affect these markets differently from the U.S. or other securities markets. Direct or indirect government intervention to stabilize the securities markets outside the U.S., as well as cross-shareholdings in certain companies, may affect trading prices and trading volumes in those markets. Also, the public availability of information concerning the foreign issuers may vary depending on their home jurisdiction and the reporting requirements imposed by their respective regulators. In addition, the foreign issuers may be subject to accounting, auditing and financial reporting standards and requirements that differ from those applicable to U.S. reporting companies.

An Investment in the Notes Is Subject to Risks Associated with Emerging Markets — Investments in securities linked directly or indirectly to emerging market equity securities, such as the securities included in the MXEF, involve many risks, including, but not limited to: economic, social, political, financial and military conditions in the emerging market; regulation by national, provincial, and local governments; less liquidity and smaller market capitalizations than exist in the case of many large U.S. companies; different accounting and disclosure standards; and political uncertainties. Stock prices of emerging market companies may be more volatile and may be affected by market developments differently than U.S. companies. Government intervention to stabilize securities markets and cross-shareholdings may affect prices and volume of trading of the securities of emerging market companies. Economic, social, political, financial and military factors could, in turn, negatively affect such companies' value. These factors could include changes in the emerging market government's economic and fiscal policies, possible imposition of, or changes in, currency exchange laws or other laws or restrictions applicable to the emerging market companies or investments in their securities, and the possibility of fluctuations in the rate of exchange between currencies. Moreover, emerging market economies may differ favorably or unfavorably from the U.S. economy in a variety of ways, including growth of gross national product, rate of inflation, capital reinvestment, resources and self-sufficiency. You should carefully consider the risks related to emerging markets, to which the Notes are susceptible, before making a decision to invest in the Notes.

The Notes Are Subject to Exchange Rate Risks — The payment amount on the Notes will be calculated based on the Basket Components, and the prices of the relevant securities including each Basket Component are converted into U.S. dollars for purposes of calculating the level of the applicable Basket Component. As a result, investors in the Notes will be exposed to currency exchange rate risk with respect to each of the currencies represented by the Basket Components. An investor's net exposure will depend on the extent to which the applicable currencies strengthen or weaken against the U.S. dollar and the relative weight of each relevant currency represented by each Basket Component. If, taking into account such weight, the dollar strengthens against such currencies, the level of a Basket Component will be adversely affected and the amount payable, if any, at maturity of the Notes may be reduced.

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.

**Changes in the Level of One Basket Component May Be Offset by Changes in the Level of the Other Basket Component** - A change in the level of one Basket Component may not correlate with changes in the levels of the other Basket Component. The level of one Basket Component may increase, while the level of the other Basket Component may not increase as much, or may even decrease. Therefore, in determining the value of the Basket as of any time, increases in the level of one Basket Component may be moderated, or wholly offset, by lesser increases or decreases in the level of the other Basket Component.

**Inconsistent Research** — RBCCM or its affiliates may issue research reports on securities that are, or may become, components of the Basket. We may also publish research from time to time on financial markets and other matters that may

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influence the value of the Basket 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 Basket. You should make your own independent investigation of the merits of investing in the Notes and the Basket.

Market Disruption Events and Adjustments - The Payment at Maturity 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.

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#### INFORMATION REGARDING THE REFERENCE INDICES

All disclosures contained in this pricing supplement regarding the Basket Components, including, without limitation, their make-up, method of calculation, and changes in their components, have been derived from publicly available sources prepared by MSCI, the sponsor of the Basket Components. Such information reflects the policies of, and is subject to change by the sponsor. The sponsor have no obligation to continue to publish, and may discontinue publication of, the Basket Components. The consequences of the index sponsor discontinuing publication of the Basket Components are discussed in the section of the product prospectus supplement entitled “General Terms of the Notes—Unavailability of the Level of the Reference Asset.” Neither we nor RBCCM accepts any responsibility for the calculation, maintenance or publication of any Basket Component or any successor index.

##### The MXEA

The MXEA is intended to measure equity market performance in developed market countries, excluding the United States and Canada. The MXEA is a free float-adjusted market capitalization equity index with a base date of December 31, 1969 and an initial value of 100. The MXEA is calculated daily in U.S. dollars and published in real time every 60 seconds during market trading hours. The MXEA currently consists of companies from the following 21 developed countries: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Hong Kong, Ireland, Israel, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland and United Kingdom.

##### The MXEF

The MXEF is intended to measure equity market performance in the global emerging markets. The index is a free float-adjusted market capitalization index with a base date of December 31, 1987 and an initial value of 100. The index is calculated daily in U.S. dollars and published in real time every 60 seconds during market trading hours. The MXEF currently consists of the following 24 emerging market country indices: Brazil, Chile, China, Colombia, Czech Republic, Greece, Egypt, Hungary, India, Indonesia, South Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Qatar, Russia, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates. As of the close on May 31, 2018, MSCI began a multi-step process to include, in the MSCI Emerging Markets Index, large cap China A shares that are not in trading suspension.

##### General - MSCI Indices

MSCI provides global equity indices intended to measure equity performance in international markets and the MSCI International Equity Indices are designed to serve as global equity performance benchmarks. In constructing these indices, MSCI applies its index construction and maintenance methodology across developed, emerging, and frontier markets.

Constructing the MSCI Global Investable Market Indices. MSCI undertakes an index construction process, which involves:

- defining the equity universe;
- determining the market investable equity universe for each market;
- determining market capitalization size segments for each market;
- applying index continuity rules for the MSCI Standard Index;
  - creating style segments within each size segment within each market; and
- classifying securities under the Global Industry Classification Standard (the “GICS”).

Defining the Equity Universe. The equity universe is defined by:

- Identifying Eligible Equity Securities: the equity universe initially looks at securities listed in any of the countries in the MSCI Global Index Series, which will be classified as either Developed Markets (“DM”) or Emerging Markets

("EM"). All listed equity securities, including Real Estate Investment Trusts and certain income trusts in Canada, are eligible for inclusion in the equity universe. Conversely, mutual funds, ETFs, equity derivatives, and most investment trusts, are not eligible for inclusion in the equity universe. Preferred shares that exhibit characteristics of equity securities are eligible in the equity universe. MSCI will analyze preferred shares on a case-by-case basis. The key criterion for preferred share eligibility is that the share should not have features that make it resemble, and behave like, a fixed income security.

Classifying Eligible Securities into the Appropriate Country: each company and its securities (i.e., share classes) are classified in only one country.

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Effective with the November 2015 semi-annual index review, companies traded outside of their country of classification (i.e. “foreign listed companies”) will become eligible for inclusion in the MSCI Country Investable Market Indexes along with the applicable MSCI Global Index. In order for a MSCI Country Investable Market Index to be eligible to include foreign listed companies, it must meet the Foreign Listing Materiality Requirement. To meet the Foreign Listing Materiality Requirement, the aggregate market capitalization of all securities represented by foreign listings should represent at least 5% of the free float-adjusted market capitalization of the relevant MSCI Country Investable Market Index.

Determining the Market Investable Equity Universes. A market investable equity universe for a market is derived by applying investability screens to individual companies and securities in the equity universe that are classified in that market. A market is equivalent to a single country, except in DM Europe, where all DM countries in Europe are aggregated into a single market for index construction purposes. Subsequently, individual DM Europe country indices within the MSCI Europe Index are derived from the constituents of the MSCI Europe Index under the global investable market indices methodology.

A security may be listed in the country where it is classified (i.e. local listing) and/or in a different country (i.e. “foreign listing”). Securities may be represented by either a local or foreign listing. A security may be represented by a foreign listing only if:

- The security is classified in a country that meets the Foreign Listing Materiality Requirement, and
- The security’s foreign listing is traded on an eligible stock exchange of: a DM country if the security is classified in a DM country, a DM or an EM country if the security is classified in an EM country, or a DM or an EM or a FM country if the security is classified in a FM country. Securities in that country may not be represented by a foreign listing in the global investable equity universe if a country does not meet the requirement.

The investability screens used to determine the investable equity universe in each market are as follows:

Equity Universe Minimum Size Requirement: this investability screen is applied at the company level. In order to be included in a market investable equity universe, a company must have the required minimum full market capitalization.

Equity Universe Minimum Free Float–Adjusted Market Capitalization Requirement: this investability screen is applied at the individual security level. To be eligible for inclusion in a market investable equity universe, a security must have a free float–adjusted market capitalization equal to or higher than 50% of the equity universe minimum size requirement.

DM and EM Minimum Liquidity Requirement: this investability screen is applied at the individual security level. To be eligible for inclusion in a market investable equity universe, a security must have adequate liquidity. The twelve-month and three-month Annual Traded Value Ratio (“ATVR”), a measure that screens out extreme daily trading volumes and takes into account the free float–adjusted market capitalization size of securities, together with the three-month frequency of trading are used to measure liquidity. A minimum liquidity level of 20% of three- and twelve-month ATVR and 90% of three-month frequency of trading over the last four consecutive quarters are required for inclusion of a security in a market investable equity universe of a DM, and a minimum liquidity level of 15% of three- and twelve-month ATVR and 80% of three-month frequency of trading over the last four consecutive quarters are required for inclusion of a security in a market investable equity universe of an EM.

Global Minimum Foreign Inclusion Factor Requirement: this investability screen is applied at the individual security level. To be eligible for inclusion in a market investable equity universe, a security’s Foreign Inclusion Factor (“FIF”) must reach a certain threshold. The FIF of a security is defined as the proportion of shares outstanding that is available for purchase in the public equity markets by international investors. This proportion accounts for the available free float of and/or the foreign ownership limits applicable to a specific security (or company). In general, a

security must have an FIF equal to or larger than 0.15 to be eligible for inclusion in a market investable equity universe.

**Minimum Length of Trading Requirement:** this investability screen is applied at the individual security level. For an initial public offering (“IPO”) to be eligible for inclusion in a market investable equity universe, the new issue must have started trading at least three months before the implementation of a semi-annual index review (as described below). This requirement is applicable to small new issues in all markets. Large IPOs are not subject to the minimum length of trading requirement and may be included in a market investable equity universe and the Standard Index outside of a Quarterly or Semi-Annual Index Review.

**Minimum Foreign Room Requirement:** this investability screen is applied at the individual security level. For a security that is subject to a foreign ownership limit to be eligible for inclusion in a market investable equity universe, the

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proportion of shares still available to foreign investors relative to the maximum allowed (referred to as “foreign room”) must be at least 15%.

Defining Market Capitalization Size Segments for Each Market. Once a market investable equity universe is defined, it is segmented into the following size-based indices:

- Investable Market Index (Large + Mid + Small);
- Standard Index (Large + Mid);
- Large Cap Index;
- Mid Cap Index; or
- Small Cap Index.

Creating the size segment indices in each market involves the following steps:

- defining the market coverage target range for each size segment;
- determining the global minimum size range for each size segment;
- determining the market size-segment cutoffs and associated segment number of companies;
- assigning companies to the size segments; and
- applying final size-segment investability requirements.

Index Continuity Rules for the Standard Indices. In order to achieve index continuity, as well as to provide some basic level of diversification within a market index, and notwithstanding the effect of other index construction rules described in this section, a minimum number of five constituents will be maintained for a DM Standard Index and a minimum number of three constituents will be maintained for an EM Standard Index.

Creating Style Indices within Each Size Segment. All securities in the investable equity universe are classified into value or growth segments using the MSCI Global Value and Growth methodology.

Classifying Securities under the Global Industry Classification Standard. All securities in the global investable equity universe are assigned to the industry that best describes their business activities. To this end, MSCI has designed, in conjunction with Standard & Poor’s, the GICS. Under the GICS, each company is assigned to one sub-industry according to its principal business activity. Therefore, a company can belong to only one industry grouping at each of the four levels of the GICS.

#### Calculation Methodology for the Underlying Index

The performance of the underlying index is a free float weighted average of the U.S. dollar values of its component securities.

Prices used to calculate the component securities are the official exchange closing prices or prices accepted as such in the relevant market. In case of market closure, or if a security does not trade on a specific day or during a specific period, MSCI carries forward the previous day’s price (or latest available closing price). In the event of a market outage resulting in any component security price to be unavailable, MSCI will generally use the last reported price for such component security for the purpose of performance calculation unless MSCI determines that another price is more appropriate based on the circumstances. Closing prices are converted into U.S. dollars, as applicable, using the closing exchange rates calculated by WM/Reuters at 4:00 P.M. London time.

#### Index Maintenance

The MSCI Global Investable Market Indices are maintained with the objective of reflecting the evolution of the underlying equity markets and segments on a timely basis, while seeking to achieve index continuity, continuous investability of constituents and replicability of the indices, and index stability and low index turnover. In particular, index maintenance involves:

- (i) Semi-Annual Index Reviews (“SAIRs”) in May and November of the Size Segment and Global Value and Growth Indices which include:

· updating the indices on the basis of a fully refreshed equity universe;

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- taking buffer rules into consideration for migration of securities across size and style segments; and
  - updating FIFs and Number of Shares (“NOS”).
- (ii) Quarterly Index Reviews (“QIRs”) in February and August of the Size Segment Indices aimed at:
- including significant new eligible securities (such as IPOs that were not eligible for earlier inclusion) in the index;
  - allowing for significant moves of companies within the Size Segment Indices, using wider buffers than in the SAIR;
  - and
  - reflecting the impact of significant market events on FIFs and updating NOS.
- (iii) Ongoing Event–Related Changes: changes of this type are generally implemented in the indices as they occur. Significantly large IPOs are included in the indices after the close of the company’s tenth day of trading.
- Neither we nor RBC Capital Markets, LLC accepts any responsibility for the calculation, maintenance, or publication of, or for any error, omission, or disruption in, the Basket Components or any successor to the Basket Components.

#### License Agreement

We have entered into a non-exclusive license agreement with MSCI providing for the license to us and certain of our affiliated or subsidiary companies, in exchange for a fee, of the right to use indices owned and published by MSCI (including the Basket Components) in connection with certain securities, including the Notes offered hereby. The license agreement between us and MSCI requires that the following language be stated in this document: THE NOTES ARE NOT SPONSORED, ENDORSED, SOLD OR PROMOTED BY MSCI INC. (“MSCI”), ANY AFFILIATE OF MSCI OR ANY OTHER PARTY INVOLVED IN, OR RELATED TO, MAKING OR COMPILING ANY MSCI INDEX. THE MSCI INDEXES ARE THE EXCLUSIVE PROPERTY OF MSCI. MSCI AND THE MSCI INDEX NAMES ARE SERVICE MARK(S) OF MSCI OR ITS AFFILIATES AND HAVE BEEN LICENSED FOR USE FOR CERTAIN PURPOSES BY ROYAL BANK OF CANADA AND ITS AFFILIATES. NEITHER MSCI, ANY OF ITS AFFILIATES NOR ANY OTHER PARTY INVOLVED IN, OR RELATED TO, MAKING OR COMPILING ANY MSCI INDEX MAKES ANY REPRESENTATION OR WARRANTY, EXPRESS OR IMPLIED, TO THE OWNERS OF THE NOTES OR ANY MEMBER OF THE PUBLIC REGARDING THE ADVISABILITY OF INVESTING IN FINANCIAL SECURITIES GENERALLY OR IN THE NOTES PARTICULARLY OR THE ABILITY OF ANY MSCI INDEX TO TRACK CORRESPONDING STOCK MARKET PERFORMANCE. MSCI OR ITS AFFILIATES ARE THE LICENSORS OF CERTAIN TRADEMARKS, SERVICE MARKS AND TRADE NAMES AND OF THE MSCI INDEXES WHICH ARE DETERMINED, COMPOSED AND CALCULATED BY MSCI WITHOUT REGARD TO THE NOTES OR THE ISSUER OR OWNER OF THE NOTES. NEITHER MSCI, ANY OF ITS AFFILIATES NOR ANY OTHER PARTY INVOLVED IN, OR RELATED TO, MAKING OR COMPILING ANY MSCI INDEX HAS ANY OBLIGATION TO TAKE THE NEEDS OF THE ISSUERS OR OWNERS OF THE NOTES INTO CONSIDERATION IN DETERMINING, COMPOSING OR CALCULATING THE MSCI INDEXES. NEITHER MSCI, ITS AFFILIATES NOR ANY OTHER PARTY INVOLVED IN, OR RELATED TO, MAKING OR COMPILING ANY MSCI INDEX IS RESPONSIBLE FOR OR HAS PARTICIPATED IN THE DETERMINATION OF THE TIMING OF, PRICES AT, OR QUANTITIES OF THE NOTES TO BE ISSUED OR IN THE DETERMINATION OR CALCULATION OF THE EQUATION BY WHICH THE NOTES ARE REDEEMABLE FOR CASH. NEITHER MSCI, ANY OF ITS AFFILIATES NOR ANY OTHER PARTY INVOLVED IN, OR RELATED TO, THE MAKING OR COMPILING ANY MSCI INDEX HAS ANY OBLIGATION OR LIABILITY TO THE OWNERS OF THE NOTES IN CONNECTION WITH THE ADMINISTRATION, MARKETING OR OFFERING OF THE NOTES.

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#### Historical Information

The graph below sets forth the information relating to the historical performance of the MXEA for the period from January 1, 2008 through December 6, 2018.

We obtained the information regarding the historical performance of the MXEA in the graph 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 MXEA should not be taken as an indication of its future performance, and no assurance can be given as to the future levels of the MXEA.

MXEA

PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS.

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#### Historical Information

The graph below sets forth the information relating to the historical performance of the MXEF for the period from January 1, 2008 through December 6, 2018.

We obtained the information regarding the historical performance of the MXEF in the graph 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 MXEF should not be taken as an indication of its future performance, and no assurance can be given as to future levels of the MXEF.

MXEF

PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS.

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#### 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 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 Basket Components or the Notes (for example, upon a Basket Component 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 Basket Components 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.

#### SUPPLEMENTAL PLAN OF DISTRIBUTION (CONFLICTS OF INTEREST)

Delivery of the Notes will be made against payment for the Notes on December 11, 2018, 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. For additional information as to the relationship between us and RBCCM, please see the section “Plan of Distribution—Conflicts of Interest” in the prospectus.

We expect to 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 were 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 6 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.

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.

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## STRUCTURING THE NOTES

The Notes are our debt securities, the return on which is linked to the performance of the Basket Components. 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 Basket Components, 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 discount 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.

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