ROYAL BANK OF CANADA
Form 424B2
April 04, 2019

PRICING SUPPLEMENT
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Registration Statement No. 333-227001
Dated April 2, 2019
Royal Bank of Canada Capped Buffer GEARS
$3,725,000 Securities Linked to a Basket of Three Equity Indices and Two American Depositary Shares due on April 7, 2022

Investment Description

Capped Buffer GEARS (each, a "Security" and collectively, the "Securities") are our unconditional, unsecured and unsubordinated debt securities, with returns linked to an unequally weighted basket (the "Basket") of three equity indices (each, an "Underlying Index") and two American Depositary Shares (ADS) (the "Underlying Shares," and together with the Underlying Indices, the "Basket Components"). The Basket Components and their weightings are set forth below. If the Underlying Return (as defined below) is positive, we will repay the principal amount at maturity plus pay a return equal to 2 (the "Upside Gearing") times the Underlying Return, up to the Maximum Gain (as defined below). If the Underlying Return is zero or negative, but the Final Basket Level (as defined below) is greater than or equal to the Downside Threshold (as defined below), we will repay the full principal amount at maturity. However, if the Underlying Return is negative and the Final Basket Level is less than the Downside Threshold, we will pay less than the principal amount at maturity and you will lose 1% of the principal amount of your Securities for every 1% decline in the level of the Basket in excess of the Buffer (as defined below), up to a loss of 90% of your investment. Investing in the Securities involves significant risks. The Securities do not pay dividends or interest. You may lose up to 90% of your principal amount if the Final Basket Level is less than the Downside Threshold. The downside exposure to the Basket is buffered only at maturity. Any payment on the Securities, including any repayment of principal, is subject to our creditworthiness. If we default on our payment obligations, you may not receive any amounts owed to you under the Securities and you could lose your entire investment. The Securities will not be listed on any securities exchange. The Securities are not subject to conversion into our common shares under subsection 39.2(2.3) of the Canada Deposit Insurance Corporation Act.

Features Key Dates

q Enhanced Growth Potential Up to the Maximum Gain — At maturity, if the Underlying Return is positive, we will pay you the principal amount plus a return equal to the Upside Gearing times the Underlying Return, up to the Maximum Gain.

q Buffered Downside Market Exposure — If the Underlying Return is zero or negative, but the Final Basket Level is greater than or equal to the Downside Threshold, we will pay the full principal amount at maturity. However, if the Underlying Return is negative and the Final Basket Level is below the Downside Threshold, we will pay less than the full principal amount, resulting in a loss of the principal amount that is proportionate to the percentage decline in the Basket in excess of the Buffer. Accordingly, you may lose up to 90% of the principal amount of the Securities. The downside exposure to the Underlying is buffered only at maturity.

Trade Date	April 2, 2019
Settlement Date	April 5, 2019
Final Valuation Date[1]	April 4, 2022
Maturity Date[1]	April 7, 2022

[1] Subject to postponement if a market disruption event occurs, as described under "General Terms of the Securities — Payment at Maturity" in the accompanying product prospectus supplement UBS-EQUITY-1 and as further discussed below.

NOTICE TO INVESTORS: THE SECURITIES ARE SIGNIFICANTLY RISKIER THAN CONVENTIONAL DEBT INSTRUMENTS. WE ARE NOT NECESSARILY OBLIGATED TO REPAY THE FULL PRINCIPAL

AMOUNT OF THE SECURITIES AT MATURITY, AND THE SECURITIES HAVE DOWNSIDE MARKET RISK SIMILAR OF THE BASKET. THIS MARKET RISK IS IN ADDITION TO THE CREDIT RISK INHERENT IN PURCHASING OUR DEBT OBLIGATION. YOU SHOULD NOT PURCHASE THE SECURITIES IF YOU DO NOT UNDERSTAND OR ARE NOT COMFORTABLE WITH THE SIGNIFICANT RISKS INVOLVED IN INVESTING IN THE SECURITIES.

YOU SHOULD CAREFULLY CONSIDER THE RISKS DESCRIBED UNDER “KEY RISKS” BEGINNING ON PAGE 5 OF THIS PRICING SUPPLEMENT AND UNDER ‘‘RISK FACTORS’’ BEGINNING ON PAGE PS-4 OF THE ACCOMPANYING PRODUCT PROSPECTUS SUPPLEMENT UBS-EQUITY-1 BEFORE PURCHASING ANY SECURITIES. EVENTS RELATING TO ANY OF THOSE RISKS, OR OTHER RISKS AND UNCERTAINTIES, COULD ADVERSELY AFFECT THE MARKET VALUE OF, AND THE RETURN ON, THE SECURITIES. YOU COULD LOSE A SIGNIFICANT PORTION OF THE PRINCIPAL AMOUNT OF THE SECURITIES.

Security Offering

We are offering Capped Buffer GEARS Linked to the Basket described below. The Securities are offered at a minimum investment of 100 Securities, at the Price to Public described below. The return on the principal amount is subject to, and will not exceed, the predetermined Maximum Gain.

Basket Components with Weightings	Bloomberg Symbols	Buffer	Downside Threshold	Upside Gearing	Maximum Gain	Initial Basket Level	CUSIP	ISIN
S&P 500® Index (50%)	SPX							
EURO STOXX 50® Index (20%)	SX5E							
MSCI Emerging Markets Index (20%)	MXEF	10%	90	2	33%	100	78014H557	US78014H5578
ADSs of Alibaba Group Holding Limited (5%)	BABA							
ADSs of Baidu, Inc. (5%)	BIDU							

See “Additional Information About Royal Bank of Canada and the Securities” in this pricing supplement. The Securities will have the terms specified in the prospectus dated September 7, 2018, the prospectus supplement dated September 7, 2018, product prospectus supplement UBS-EQUITY-1 dated January 18, 2019 and this pricing supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the Securities or passed upon the accuracy or the adequacy of this pricing supplement or the accompanying prospectus, prospectus supplement and product prospectus supplement UBS-EQUITY-1. Any representation to the contrary is a criminal offense.

	Price to Public(1)		Fees and Commissions(1)		Proceeds to Us	
Offering of the Securities	Total	Per Security	Total	Per Security	Total	Per Security
	$3,725,000.00	$10.00	$67,050.00	$0.18	$3,657,950.00	$9.82

(1) UBS Financial Services Inc., which we refer to as UBS, will receive a commission of $0.18 per $10 principal amount of the Securities. See “Supplemental Plan of Distribution (Conflicts of Interest)” on the last page of this pricing supplement.

The initial estimated value of the Securities as of the date of this document is $9.7357 per $10 in principal amount, which is less than the price to public. The actual value of the Securities 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 under “Key Risks,” “Supplemental Plan of Distribution (Conflicts of Interest)” and “Structuring the Securities” below.

The Securities will not constitute deposits insured under the Canada Deposit Insurance Corporation Act or by the United States Federal Deposit Insurance Corporation or any other Canadian or United States government agency or instrumentality.

UBS Financial Services Inc. RBC Capital Markets, LLC

Additional Information About Royal Bank of Canada and the Securities

You should read this pricing supplement together with the prospectus dated September 7, 2018, as supplemented by the prospectus supplement dated September 7, 2018, relating to our senior global medium-term notes, Series H, of which these Securities are a part, and the more detailed information contained in product prospectus supplement UBS-EQUITY-1 dated January 18, 2019. This pricing supplement, together with the documents listed below, contains the terms of the Securities and supersedes all other 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, fact sheets, brochures or other educational materials of ours. You should carefully consider, among other things, the matters set forth in "Risk Factors" in the accompanying product prospectus supplement UBS-EQUITY-1, as the Securities involve risks not associated with conventional debt securities.

If the terms discussed in this pricing supplement differ from those discussed in the product prospectus supplement, the prospectus supplement, or the prospectus, the terms discussed herein will control.

You may access these on the SEC website at www.sec.gov as follows (or if such address has changed, by reviewing our filing for the relevant date on the SEC website):

- Product prospectus supplement EQUITY-1 dated January 18, 2019: https://www.sec.gov/Archives/edgar/data/1000275/000114036119001337/form424b5.htm
- Prospectus supplement dated September 7, 2018: https://www.sec.gov/Archives/edgar/data/1000275/000121465918005975/f97180424b3.htm
- Prospectus dated September 7, 2018: https://www.sec.gov/Archives/edgar/data/1000275/000121465918005973/l96181424b3.htm

As used in this pricing supplement, "we," "us" or "our" refers to Royal Bank of Canada.

Investor Suitability

The Securities may be suitable for you if, among other considerations:

- You fully understand the risks inherent in an investment in the Securities, including the risk of loss of up to 90% of the principal amount.
- You can tolerate the loss of up to 90% of your initial investment and are willing to make an investment that has similar downside market risk as a hypothetical investment in the Basket, subject to the Buffer at maturity.
- You believe that the value of the Basket will appreciate over the term of the Securities and that the appreciation is unlikely to exceed the Maximum Gain.
- You understand and accept that your potential return is limited by the Maximum Gain set forth on the cover page.
- You can tolerate fluctuations in the price of the Securities prior to maturity that may be similar to or exceed the downside fluctuations in the value of the Basket.
- You do not seek current income from your investment and are willing to forgo dividends paid on the securities represented by the Basket.
- You are willing to hold the Securities to maturity and accept that there may be little or no secondary market for the Securities.
- You understand and accept the risks associated with the Basket Components.
- You are willing to assume our credit risk for all payments under the Securities, and understand that if we default on our obligations, you may not receive any amounts due to you, including any repayment of principal.

The Securities may not be suitable for you if, among other considerations:

- You do not fully understand the risks inherent in an investment in the Securities, including the risk of loss of up to 90% of your investment.
- You require an investment designed to provide a full return of principal at maturity.
- You cannot tolerate the loss of up to 90% of the principal amount of the Securities, and you are not willing to make an investment that has similar downside market risk as a hypothetical investment in the Basket, subject to the Buffer at maturity.
- You believe that the value of the Basket will decline over the term of the Securities, or you believe the value of the Basket will appreciate over the term of the Securities by a percentage that exceeds the Maximum Gain.
- You seek an investment that has unlimited return potential without a cap on appreciation.
- You are unwilling to invest in the Securities based on the Maximum Gain set forth on the cover page.
- You cannot tolerate fluctuations in the price of the Securities prior to maturity that may be similar to or exceed the downside fluctuations in the value of the Basket.
- You seek current income from this investment or prefer to receive the dividends paid on the securities represented by the Basket.
- You are unable or unwilling to hold the Securities to maturity, or you seek an investment for which there will be an active secondary market.
- You do not understand or accept the risks associated with the Basket Components.
- You are not willing to assume our credit risk for all payments under the Securities, including any repayment of principal.

The suitability considerations identified above are not exhaustive. Whether or not the Securities are a suitable investment for you will depend on your individual circumstances, and you should reach an investment decision only after you and your investment, legal, tax, accounting, and other advisers have carefully considered the suitability of an investment in the Securities in light of your particular circumstances. You should also review carefully the “Key Risks” in this pricing supplement and “Risk Factors” in the accompanying product prospectus supplement UBS-EQUITY-1 for risks related to an investment in the Securities. In addition, you should review carefully the section below, “Information About the Basket Components,” for more information about the Basket Components.

Final Terms of the Securities[1]

Issuer:	Royal Bank of Canada
Issue Price:	$10 per Security (subject to a minimum purchase of 100 Securities)
Principal Amount:	$10 per Security.
Term:	Approximately 3 years
Basket:	A basket consisting of the following:

Basket Components	Bloomberg Symbols	Component Weightings	Initial Levels
S&P 500® Index	SPX	50%	2,867.24
EURO STOXX 50® Index	SX5E	20%	3,395.70
MSCI Emerging Markets Index	MXEF	20%	1,071.14
ADSs of BABA	BABA	5%	$181.74
ADSs of BIDU	BIDU	5%	$170.98

Upside Gearing:	2
Maximum Gain:	33%
Buffer:	10%
Downside Threshold:	90% of the Initial Basket Level
Payment at Maturity (per $10 Security):	If the Underlying Return is positive, we will pay you: $10 + ($10 x the lesser of (i) Upside Gearing x Underlying Return and (ii) Maximum Gain) If the Underlying Return is zero or negative, but the Final Basket Level is not below the Downside Threshold, we will pay you: $10 If the Underlying Return is negative and the Final Basket Level is below the Downside Threshold, we will pay you: $10 + ($10 x (Underlying Return + Buffer)) In this scenario, you will lose up to 90% of the principal amount of the Securities, in an amount proportionate to the percentage the Underlying has declined in excess of the Buffer.
Underlying Return:	$\frac{\text{Final Basket Level – Initial Basket Level}}{\text{Initial Basket Level}}$
Initial Basket Level:	100
Final Basket Level:	10 × [1 + (the sum of the Component Return of each Basket Component multiplied by its Component Weighting)]
Component Return of Each Basket Component:	The Component Return with respect to each Basket Component reflects its performance, calculated as follows: $\frac{\text{Final Level – Initial Level}}{\text{Initial Level}}$

Initial Level:	With respect to each Basket Component, its closing level or its closing price (as applicable) on the Trade Date, as indicated in the table above.
Final Level:	With respect to each Basket Component, its closing level or closing price (as applicable) on the Final Valuation Date. If there is a market disruption event as to a Basket Component on the Final Valuation Date, or if that date is not a trading day as to a Basket Component, only the determination of the Final Level for that Basket Component will be postponed, as set forth in the product prospectus supplement and as further set forth below.

Investment Timeline

Trade Date:	The Initial Level of each Basket Component was determined, and the Initial Basket Level was set to 100.
Maturity Date:	The Final Level and the Component Return of each Basket Component, the Final Basket Level and the Underlying Return are determined. If the Underlying Return is positive, we will pay you, for each $10 Security: $10 + ($10 x the lesser of (i) Upside Gearing x Underlying Return and (ii) Maximum Gain If the Underlying Return is zero or negative, but the Final Basket Level is not below the Downside Threshold, we will pay you a cash payment of $10 per $10 Security. If the Final Basket Level is negative and the Final Basket Level is below the Downside Threshold, we will pay you a cash payment that is less than your initial investment of $10 per Security, resulting in a loss that is proportionate to the percentage decline of the Underlying in excess of the Buffer, and equal to: $10 + ($10 x (Underlying Return + Buffer) In this scenario, you will lose up to 90% of the principal amount of the Securities, in an amount proportionate to the percentage that the Underlying has declined in excess of the Buffer.

INVESTING IN THE SECURITIES INVOLVES SIGNIFICANT RISKS. YOU MAY LOSE SOME OR ALL OF YOUR PRINCIPAL AMOUNT. ANY PAYMENT ON THE SECURITIES, INCLUDING ANY REPAYMENT OF PRINCIPAL, IS SUBJECT TO OUR CREDITWORTHINESS. IF WE WERE TO DEFAULT ON OUR PAYMENT OBLIGATIONS, YOU MAY NOT RECEIVE ANY AMOUNTS OWED TO YOU UNDER THE SECURITIES AND YOU COULD LOSE YOUR ENTIRE INVESTMENT.

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[1] Terms used in this pricing supplement, but not defined herein, shall have the meanings ascribed to them in the product prospectus supplement.

Key Risks

An investment in the Securities involves significant risks. Investing in the Securities is not equivalent to investing directly in any of the Basket Components. These risks are explained in more detail in the “Risk Factors” section of the accompanying product prospectus supplement UBS-EQUITY-1. We also urge you to consult your investment, legal, tax, accounting and other advisors before investing in the Securities.

Risks Relating to the Securities Generally

- Your Investment in the Securities May Result in a Loss of Principal: The Securities differ from ordinary debt securities in that we are not necessarily obligated to repay the full principal amount at maturity. The return on the Securities at maturity is linked to the performance of the Basket and will depend on whether, and the extent to which, the Underlying Return is positive or negative. If the Underlying Return is negative and the Final Basket Level is below the Downside Threshold, you will be exposed to any negative Underlying Return in excess of the Buffer, and we will pay you less than your principal amount at maturity, resulting in a loss of principal of your Securities that is proportionate to the percentage decline in the Basket in excess of the Buffer. Accordingly, you could lose up to 90% of the principal amount of the Securities.
- The Buffer Applies Only if You Hold the Securities to Maturity: The application of the Buffer only applies at maturity. If you are able to sell your Securities in the secondary market prior to maturity, you may have to sell them at a loss even if the Basket has not declined by more than 10% at the time of sale.
- The Upside Gearing Applies Only if You Hold the Securities to Maturity: The application of the Upside Gearing only applies at maturity. If you are able to sell your Securities prior to maturity in the secondary market, the price you receive will likely not reflect the full effect of the Upside Gearing and the return you realize may be less than the Upside Gearing times the return of the Basket at the time of sale, even if that return is positive and does not exceed the Maximum Gain.
- The Appreciation Potential of the Securities Is Limited by the Maximum Gain: If the Underlying Return is positive, we will pay you $10 per Security at maturity plus an additional return that will not exceed the Maximum Gain, regardless of the appreciation in the Basket, which may be significant. Therefore, you will not benefit from any appreciation of the Basket in excess of an amount that, when multiplied by the Upside Gearing, exceeds the Maximum Gain and your return on the Securities may be less than your return would be on a hypothetical direct investment in the securities represented by the Basket Components.
- No Interest Payments: We will not pay any interest with respect to the Securities.
- An Investment in the Securities Is Subject to Our Credit Risk: The Securities are our unsubordinated, unsecured debt obligations, and are not, either directly or indirectly, an obligation of any third party. Any payment to be made on the Securities, including any repayment of principal at maturity, depends on our ability to satisfy our obligations as they come due. As a result, our actual and perceived creditworthiness may affect the market value of the Securities and, in the event we were to default on our obligations, you may not receive any amounts owed to you under the terms of the Securities and you could lose your entire initial investment.
- The Securities Will Be Subject to Risks, Including Non-Payment in Full, Under Canadian Bank Resolution Powers: Under Canadian bank resolution powers, the Canada Deposit Insurance Corporation ("CDIC") may, in circumstances where we have ceased, or are about to cease, to be viable, assume temporary control or ownership over us and may be granted broad powers by one or more orders of the Governor in Council (Canada), including the power to sell or dispose of all or a part of our assets, and the power to carry out or cause us to carry out a transaction or a series of transactions the purpose of which is to restructure our business. See "Description of Debt Securities — Canadian Bank Resolution Powers" in the accompanying prospectus for a description of the Canadian bank resolution powers, including the bail-in regime. If the CDIC were to take action under the Canadian bank resolution powers with respect to us, holders of the Securities could be exposed to losses.
- Your Return on the Securities May Be Lower than the Return on a Conventional Debt Security of Comparable Maturity: The return that you will receive on the Securities, 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 could earn if you bought a conventional senior interest bearing debt security that we issued with the same maturity date or if you invested directly in the securities represented by the Basket Components. Your investment may not reflect the full opportunity cost to you when you take into account factors that affect the time value of money.

Lack of Liquidity: The Securities will not be listed on any securities exchange. RBCCM intends to offer to purchase the Securities in the secondary market, but is not required to do so. Even if there is a secondary market, it may not provide enough liquidity to allow you to trade or sell the Securities easily. Because other dealers are not likely to make a secondary market for the Securities, the price at which you may be able to trade your Securities is likely to depend on the price, if any, at which RBCCM is willing to buy the Securities.

The Initial Estimated Value of the Securities Is Less than the Price to the Public: The initial estimated value that is set forth on the cover page of this document, which is less than the public offering price you pay for the Securities, does not represent a minimum price at which we, RBCCM or any of our other affiliates would be willing to purchase the Securities in any secondary market (if any exists) at any time. If you attempt to sell the Securities 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 our estimated profit and the costs relating to our hedging of the Securities. These factors, together with various credit, market and economic factors over the term of the Securities, are expected to reduce the price at which you may be able to sell the Securities in any secondary market and will affect the value of the Securities 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 Securities prior to maturity may be less than the price to public, as any such sale price would not be expected to include the underwriting discount, and our estimated profit and the costs relating to our hedging of the Securities. In addition, any price at which you may sell the Securities is likely to reflect customary bid-ask spreads for similar trades. In addition to bid-ask spreads, the value of the Securities determined for any secondary market price is expected to be based on the secondary market rate rather than the internal borrowing rate used to price the Securities and determine the initial estimated value. As a result, the secondary market price will be less than if the internal borrowing rate was used. The Securities are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your Securities to maturity.

Our Initial Estimated Value of the Securities Is an Estimate Only, Calculated as of the Time the Terms of the Securities Were Set: The initial estimated value of the Securities is based on the value of our obligation to make the payments on the Securities, together with the mid-market value of the derivative embedded in the terms of the Securities. See "Structuring the Securities" 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 Securities. These assumptions are based on certain forecasts about future events, which may prove to be incorrect. Other entities may value the Securities or similar securities at a price that is significantly different than we do.

The value of the Securities 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 Securities in any secondary market, if any, should be expected to differ materially from the initial estimated value of your Securities and the amount that may be paid at maturity.

- Changes in the Values of One or More of the Basket Components May Be Offset by Changes in the Values of One or More of the Other Basket Components: Changes in the values of the Basket Components may not correlate with each other. At a time when the value of one of the Basket Components increases, the level of any other Basket Components may not increase as much or may even decline. Therefore, in calculating the Final Basket Level, an increase in the value of one of the Basket Components may be moderated, or more than offset, by a lesser increase or decline in the level of any other Basket Comments. In addition, because the SPX makes up 50% of the Basket, we expect that generally the market value of your Securities and your payment at maturity will depend to a greater extent on the performance of the SPX than the performance of each of the other Basket Components. Further, high correlation of movements in the values of the Basket Components during periods of negative returns among them could have an adverse effect on any payment on the Securities and the amount that may be paid at maturity.
- No Dividend Payments or Voting Rights: Investing in the Securities is not equivalent to investing directly in any of the securities represented by the Basket Components. As a holder of the Securities, you will not have voting rights or rights to receive cash dividends or other distributions or other rights that holders of those securities would have. The Underlying Return excludes any cash dividend payments paid on these securities.
- An Investment in the Securities Is Subject to Risks Associated with Non-U.S. Securities Markets: The securities included in the SX5E and the MXEF have been issued by non-U.S. companies. An investment in securities linked to the value of non-U.S. equity securities involves particular risks. Non-U.S. securities markets may be more volatile than U.S. securities markets, and market developments may affect non-U.S. securities markets differently from the U.S. securities markets. Direct or indirect government intervention to stabilize these non-U.S. securities markets, as well as cross shareholdings among non-U.S. companies, may affect trading prices and volumes in those markets. Also, there is generally less publicly available information in the U.S. about non-U.S. companies than about those U.S. companies that are subject to the reporting requirements of the SEC, and non-U.S. companies are subject to accounting, disclosure, auditing and financial reporting standards and requirements that differ from those applicable to U.S. reporting companies.

Prices of securities in non-U.S. countries are subject to political, economic, financial and social factors that may be unique to the particular countries. These factors, which could negatively affect the non-U.S. securities markets, include the possibility of recent or future changes in the economic and fiscal policies of non-U.S. governments, the possible imposition of, or changes in, currency exchange laws or other non-U.S. laws or restrictions applicable to non-U.S. companies or investments in non-U.S. equity securities, the possibility of fluctuations in the rate of exchange between currencies, the possibility of outbreaks of hostility and political instability and the possibility of natural disaster or adverse public health developments in the relevant region. Moreover, the economies of certain foreign countries may differ favorably or unfavorably from the U.S. economy in important respects, such as growth of gross national product, rate of inflation, trade surpluses or deficits, capital reinvestment, resources and self-sufficiency.

- An Investment in the Securities Is Subject to Risks Associated with Emerging Markets: The securities included in the MXEF have been issued by emerging market companies. Investments in securities linked directly or indirectly to emerging market equity securities 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 Securities are susceptible, before making a decision to invest in the Securities.

- The Return on the Securities Will Not Be Adjusted for the Exchange Rates Related to the Underlying Indices: Although the equity securities that comprise the SX5E and the MXEF are traded in the foreign currencies, and your Securities are denominated in U.S. dollars, the amount payable on your Securities will not be adjusted for changes in the exchange rates between the U.S. dollar and the relevant foreign currencies. Therefore, if a relevant foreign currency appreciates or depreciates relative to the U.S. dollar over the term of the Securities, you will not receive any additional payment or incur any reduction in any payment on the Securities. Changes in exchange rates, however, may also reflect changes in the foreign economies that in turn may affect the level of one or both of these indices, and therefore the return on your Securities.
- Changes Affecting an Underlying Index: The policies of an index sponsor concerning additions, deletions and substitutions of the stocks included in the relevant Underlying Index and the manner in which the index sponsor takes account of certain changes affecting those stocks included in the relevant Underlying Index may adversely affect the level of that Underlying Index. The policies of an index sponsor with respect to the calculation of the relevant Underlying Index could also adversely affect the level of that Underlying Index. An index sponsor may discontinue or suspend calculation or dissemination of the relevant Underlying Index and has no obligation to consider your interests in the Securities when taking any action regarding the relevant Underlying Index. Any such actions could have an adverse effect on the value of the Securities.
- The Historical Values of any Basket Component Should Not Be Taken as an Indication of Its Future Prices During the Term of the Securities: The values of the Basket Components will determine the value of the Securities at any given time. However, it is impossible to predict whether the value of any Basket Component will rise or fall, and the values of the Basket Components will be influenced by complex and interrelated political, economic, financial and other factors that can affect the value of the Basket.
- Potential Conflicts: We, UBS and our respective affiliates play a variety of roles in connection with the issuance of the Securities, including hedging our obligations under the Securities. In performing these duties, the economic interests of the calculation agent and other affiliates of ours and those of UBS are potentially adverse to your interests as an investor in the Securities.

We, UBS and our respective affiliates may do business from time to time with the issuers of the securities represented by the Basket Components. We may engage in lending or financing transactions with them, or advise them in connection with acquisitions or other transactions. We may acquire non-public information about these companies, which we have no obligation to provide to you.

- Potentially Inconsistent Research, Opinions or Recommendations by RBCCM, UBS or Their Affiliates: RBCCM, UBS or their respective affiliates may publish research, express opinions or provide recommendations that are inconsistent with investing in or holding the Securities, and which may be revised at any time. Any such research, opinions or recommendations could affect the value of the Basket, and therefore, the market value of the Securities.
- Uncertain Tax Treatment: Significant aspects of the tax treatment of an investment in the Securities are uncertain. You should consult your tax adviser about your tax situation.
- Potential Royal Bank of Canada and UBS Impact on Price: Trading or other transactions by Royal Bank of Canada, UBS and our respective affiliates in the equity securities represented by the Basket or in futures, options, exchange-traded funds or other derivative products on those equity securities may adversely affect the market value of those equity securities, the value of that Basket Component, and, therefore, the market value of the Securities.
- The Probability That the Value of the Basket Will Fall Below the Downside Threshold on the Final Valuation Date Will Depend on the Volatility of the Basket Components: "Volatility" refers to the frequency and magnitude of changes in the value of the Basket Components. Greater expected volatility with respect to the Basket Components reflects a higher expectation as of the Trade Date that the level Basket could close below the Initial Basket Level on the Final Valuation Date, resulting in the loss of some or all of your investment. However, a Basket Component's volatility can change significantly over the term of the Securities. The level of the Basket could fall sharply, which could result in a significant loss of principal.
- The Terms of the Securities Were Influenced at Issuance and Their Market Value Prior to Maturity Will Be Influenced by Many Unpredictable Factors: Many economic and market factors influenced the terms of the Securities at issuance and will affect their value prior to maturity. These factors are similar in some ways to those that could affect the value of a combination of instruments that might be used to replicate the payments on the Securities, including a combination of a bond with one or more options or other derivative instruments. For the market value of the Securities, we expect that, generally, the value of the Basket Components on any day will affect the value of the Securities more than any other single factor. However, you should not expect the value of the Securities in the secondary market to vary in proportion to changes in the values of the Basket Components. The value of the Securities will be affected by a number of other factors that may either offset or magnify each other, including:

- the actual or expected volatility of each Basket Component;
- the time remaining to maturity of the Securities;
- the dividend rates on the equity securities represented by the Basket Components;
- interest and yield rates in the market generally, as well as in each of the markets of the equity securities represented by the Basket Components;
- a variety of economic, financial, political, regulatory or judicial events;
- our creditworthiness, including actual or anticipated downgrades in our credit ratings; and
- whether any organization event affects any Underlying Share that requires the calculation agent to adjust the terms of the Securities.

Some or all of these factors influenced the terms of the Securities at issuance as well as the price you will receive if you choose to sell the Securities prior to maturity. The impact of any of the factors set forth above may enhance or offset some or all of any change resulting from another factor or factors. You may have to sell the Securities at a substantial discount from the principal amount if, for example, the value of the Basket is at, below or not sufficiently above, the Initial Basket Level.

Additional Risks Relating to the ADSs

- The value of an ADS may not accurately track the value of the underlying stock represented by that ADS: Each ADS represents shares of the relevant company (an "underlying company"). The trading patterns of the ADSs will generally reflect the characteristics and valuations of the underlying ADS stock; however, the value of the ADSs may not completely track the value of those shares. Trading volume and pricing on any applicable non-U.S. exchange may, but will not necessarily, have similar characteristics as the ADSs. For example, certain factors may increase or decrease the public float of the ADSs and, as a result, the ADSs may have less liquidity or lower market value than the underlying ADS.

Adverse trading conditions in the applicable non-U.S. market may negatively affect the value of the applicable stock: Holders of the underlying company's ADSs may usually surrender the ADSs in order to receive and trade the underlying ADS stock. This provision permits investors in the ADSs to take advantage of price differentials between markets. However, this provision may also cause the market prices of the applicable ADS to more closely correspond with the values of the common shares in the applicable non-U.S. markets. As a result, a market outside of the U.S. for the underlying ADS stock that is not liquid may also result in an illiquid market for the ADSs.

¨ Your anti-dilution protection is limited: The calculation agent will make adjustments to the price of an ADS as described in the product prospectus supplement. The calculation agent is not required, however, to make such adjustments in response to all events that could affect the applicable ADSs. If an event occurs that does not require the calculation agent to make an adjustment, such as an offering of common shares for cash, the value of the notes may be materially and adversely affected. In addition, all determinations and calculations concerning any such adjustment will be made by 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, or that is in addition to, that described in the product prospectus supplement as necessary to achieve an equitable result.

Hypothetical Examples and Return Table at Maturity

Hypothetical terms only. Actual terms may vary. See the cover page for actual offering terms. The following table and hypothetical examples below illustrate the payment at maturity per $10.00 Security for a hypothetical range of Underlying Returns from -100.00% to +100.00% and are based on the Initial Basket Level of 100.00, the Buffer of 10% the Maximum Gain of 33% and the Upside Gearing of 2. The hypothetical payment at maturity examples set forth below are for illustrative purposes only and may not be the actual returns applicable to a purchaser of the Securities. The actual payment at maturity will be determined based on the Final Basket Level. You should consider carefully whether the Securities are suitable to your investment goals. The numbers appearing in the table below have been rounded for ease of analysis.

Example 1 – On the Final Valuation Date, the Underlying closes 2% above the Initial Basket Level. Because the Underlying Return is positive, we will pay you an amount based upon the lesser of the Underlying Return times the Upside Gearing and the Maximum Gain. Since the Underlying Return of 2% times the Upside Gearing is less than the Maximum Gain, we will pay you at maturity a cash payment of $10.40 per $10 principal amount Security, calculated as follows:

$10 + ($10 x 2% x 2) = $10 + $0.40 = $10.40

Example 2 – On the Final Valuation Date, the Underlying closes 40% above the Initial Basket Level. Because the Underlying Return is positive, we will pay you an amount based upon the lesser of the Underlying Return times the Upside Gearing and the Maximum Gain. Since the Underlying Return of 40% times the Upside Gearing is greater than the Maximum Gain, we will pay you at maturity a cash payment of $13.30 per $10 principal amount Security, calculated as follows:

$10 + ($10 x 33%) = $10 + $3.30 = $13.30

Example 3 – On the Final Valuation Date, the Underlying closes 5% below the Initial Basket Level. Because the Underlying Return is -5%, which is negative, but the Final Basket Level is not less than the Downside Threshold, we will pay you at maturity the principal amount ($10).

Example 4 – On the Final Valuation Date, the Underlying closes 40% below the Initial Basket Level. Because the Underlying Return is -40%, which is negative, and the Final Basket Level is below the Downside Threshold, we will pay you at maturity a cash payment of $7.00 per $10 principal amount Security (a 30% loss on the principal amount), calculated as follows:

$10 + ($10 x (-40% + 10%)) = $10 - $3.00 = $7.00

Hypothetical Final Basket Level ($)	Hypothetical Underlying Return[1]	Hypothetical Payment at Maturity ($)	Hypothetical Total Return on Securities[2]
200.00	100.00%	$13.30	33.00%
175.00	75.00%	$13.30	33.00%
150.00	50.00%	$13.30	33.00%
140.00	40.00%	$13.30	33.00%
130.00	30.00%	$13.30	33.00%
120.00	20.00%	$13.30	33.00%
116.50	16.50%	$13.30	33.00%
115.00	15.00%	$13.00	30.00%
110.00	10.00%	$12.00	20.00%
104.00	4.00%	$10.80	8.00%
102.00	2.00%	$10.40	4.00%
100.00	0.00%	$10.00	0.00%
95.00	-5.00%	$10.00	0.00%
90.00	-10.00%	$10.00	0.00%
80.00	-20.00%	$9.00	-10.00%
70.00	-30.00%	$8.00	-20.00%
60.00	-40.00%	$7.00	-30.00%
50.00	-50.00%	$6.00	-40.00%

25.00	-75.00%	$3.50	-65.00%
0.00	-100.00%	$10.00	-90.00%

(1) The Underlying Return excludes any cash dividend payments.
(2) The “total return” is the number, expressed as a percentage, that results from comparing the payment at maturity per $10 principal amount Security to the purchase price of $10 per Security.

Information About the Basket Components

We have derived all information contained in this document regarding each Basket Component, including the historical performance information, from publicly available sources, without independent verification.
As to each Underlying Index, the information reflects the policies of, and is subject to change by, its index sponsor. Each index sponsor, which owns the copyright and all other rights to the applicable Underlying Index, has no obligation to continue to publish, and may discontinue publication of the relevant Underlying Index. None of us, UBS or RBCCM accepts any responsibility for the calculation, maintenance or publication of any Underlying Index or any successor index.

The S&P 500® Index

The SPX is intended to provide an indication of the pattern of common stock price movement in the large capitalization segment of the U.S. equitymarket. The calculation of the level of the SPX is based on the relative value of the aggregate market value of the common stocks of 500 companies as of a particular time compared to the aggregate average market value of the common stocks of 500 similar companies during the base period of the years 1941 through 1943.
The index sponsor calculates the SPX by reference to the prices of the constituent stocks of the SPX without taking account of the value of dividends paid on those stocks. As a result, the return on the Securities will not reflect the return you would realize if you actually owned the SPX constituent stocks and received the dividends paid on those stocks.

Computation of the SPX

Historically, the market value of any component stock of the SPX was calculated as the product of the market price per share and the number of then outstanding shares of such component stock. In March 2005, the index sponsor began shifting the SPX halfway from a market capitalization weighted formula to a float-adjusted formula, before moving the SPX to full float adjustment on September 16, 2005. The index sponsor's criteria for selecting stocks for the SPX did not change with the shift to float adjustment. However, the adjustment affects each company's weight in the SPX.
Under float adjustment, the share counts used in calculating the SPX reflect only those shares that are available to investors, not all of a company's outstanding shares. Float adjustment excludes shares that are closely held by control groups, other publicly traded companies or government agencies.
In September 2012, all shareholdings representing more than 5% of a stock's outstanding shares, other than holdings by "block owners," were removed from the float for purposes of calculating the SPX. Generally, these "control holders" will include officers and directors, private equity, venture capital and special equity firms, other publicly traded companies that hold shares for control, strategic partners, holders of restricted shares, ESOPs, employee and family trusts, foundations associated with the company, holders of unlisted share classes of stock, government entities at all levels (other than government retirement/pension funds) and any individual person who controls a 5% or greater stake in a company as reported in regulatory filings. However, holdings by block owners, such as depositary banks, pension funds, mutual funds and ETF providers, 401(k) plans of the company, government retirement/pension funds, investment funds of insurance companies, asset managers and investment funds, independent foundations and savings and investment plans, will ordinarily be considered part of the float.
Treasury stock, stock options, restricted shares, equity participation units, warrants, preferred stock, convertible stock, and rights are not part of the float. Shares held in a trust to allow investors in countries outside the country of domicile, such as depositary shares and Canadian exchangeable shares are normally part of the float unless those shares form a control block.
For each stock, an investable weight factor ("IWF") is calculated by dividing the available float shares by the total shares outstanding. Available float shares are defined as the total shares outstanding less shares held by control holders. This calculation is subject to a 5% minimum threshold for control blocks. For example, if a company's officers and directors hold 3% of the company's shares, and no other control group holds 5% of the company's shares, the index sponsor would assign that company an IWF of 1.00, as no control group meets the 5% threshold. However, if a company's officers and directors hold 3% of the company's shares and another control group holds 20% of the company's shares, the index sponsor would assign an IWF of 0.77, reflecting the fact that 23% of the company's outstanding shares are considered to be held for control. As of July 31, 2017, companies with multiple share class

lines are no longer eligible for inclusion in the SPX. Constituents of the SPX prior to July 31, 2017 with multiple share class lines will be grandfathered in and continue to be included in the SPX. If a constituent company of the SPX reorganizes into a multiple share class line structure, that company will remain in the SPX at the discretion of the S&P Index Committee in order to minimize turnover

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

Index Maintenance

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

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

Changes in a company's shares outstanding and IWF due to its acquisition of another public company are made as soon as reasonably possible. At S&P's discretion, de minimis merger and acquisition share changes are accumulated and implemented with the quarterly share rebalancing.

All other changes of less than 5% are accumulated and made quarterly on the third Friday of March, June, September, and December.

Changes in a company's total shares outstanding of 5% or more due to public offerings are made as soon as reasonably possible. Other changes of 5% or more (for example, due to tender offers, Dutch auctions, voluntary exchange offers, company stock repurchases, private placements, acquisitions of private companies or non-index companies that do not trade on a major exchange, redemptions, exercise of options, warrants, conversion of preferred stock, notes, debt, equity participations, at-the-market stock offerings or other recapitalizations) are made weekly, and are generally announced on Fridays for implementation after the close of trading the following Friday (one week later). If a 5% or more share change causes a company's IWF to change by five percentage points or more, the IWF is updated at the same time as the share change. IWF changes resulting from partial tender offers are considered on a case-by-case basis.

License Agreement

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10

Historical Information

The following graph sets forth the closing levels of the SPX from April 2, 2009 through April 2, 2019, as reported by Bloomberg Financial Markets. The historical performance of this Underlying Index should not be taken as an indication of future performance.

11

The EURO STOXX 50® Index

The SX5E was created by STOXX, which is currently owned by Deutsche Börse AG. Publication of the SX5E began in February 1998, based on an initial SX5E level of 1,000 at December 31, 1991.

Composition and Maintenance

The SX5E is composed of 50 component stocks of market sector leaders from within the 19 EURO STOXX® Supersector indices, which represent the Eurozone portion of the STOXX Europe 600® Supersector indices.

The composition of the SX5E is reviewed annually, based on the closing stock data on the last trading day in August. The component stocks are announced on the first trading day in September. Changes to the component stocks are implemented on the third Friday in September and are effective the following trading day. Changes in the composition of the SX5E are made to ensure that the SX5E includes the 50 market sector leaders from within the SX5E.

The free float factors for each component stock used to calculate the SX5E, as described below, are reviewed, calculated, and implemented on a quarterly basis and are fixed until the next quarterly review.

The SX5E is also reviewed on an ongoing basis. Corporate actions (including initial public offerings, mergers and takeovers, spin-offs, delistings, and bankruptcy) that affect the SX5E composition are immediately reviewed. Any changes are announced, implemented, and effective in line with the type of corporate action and the magnitude of the effect.

Calculation of the SX5E

The SX5E is calculated with the "Laspeyres formula," which measures the aggregate price changes in the component stocks against a fixed base quantity weight. The formula for calculating the SX5E value can be expressed as follows:

$$\text{Index} = \frac{\text{Free float market capitalization of the index}}{\text{Adjusted base date market capitalization of the index}} \times 1{,}000$$

The "free float market capitalization of the SX5E" is equal to the sum of the products of the closing price, market capitalization, and free float factor for each component stock as of the time the SX5E is being calculated.

The SX5E is also subject to a divisor, which is adjusted to maintain the continuity of the SX5E values across changes due to corporate actions, such as the deletion and addition of stocks, the substitution of stocks, stock dividends, and stock splits.

License Agreement

We have entered into a non-exclusive license agreement with STOXX 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 STOXX (including the SX5E) in connection with certain securities, including the Securities offered hereby.

The license agreement between us and STOXX requires that the following language be stated in this document:

STOXX has no relationship to us, other than the licensing of the SX5E and the related trademarks for use in connection with the Securities. STOXX does not:

- sponsor, endorse, sell, or promote the Securities;
- recommend that any person invest in the Securities offered hereby or any other securities;
- have any responsibility or liability for or make any decisions about the timing, amount, or pricing of the Securities;
- have any responsibility or liability for the administration, management, or marketing of the Securities; or
- consider the needs of the Securities or the holders of the Securities in determining, composing, or calculating the SX5E, or have any obligation to do so.

STOXX will not have any liability in connection with the Securities. Specifically:

- STOXX does not make any warranty, express or implied, and disclaims any and all warranty concerning:
- the results to be obtained by the Securities, the holders of the Securities or any other person in connection with the use of the SX5E and the data included in the SX5E;
- the accuracy or completeness of the SX5E and its data;
- the merchantability and the fitness for a particular purpose or use of the SX5E and its data;
- STOXX will have no liability for any errors, omissions, or interruptions in the SX5E or its data; and
- Under no circumstances will STOXX be liable for any lost profits or indirect, punitive, special, or consequential damages or losses, even if STOXX knows that they might occur.

The licensing agreement between us and STOXX is solely for their benefit and our benefit, and not for the benefit of the holders of the Securities or any other third parties.

Historical Information

The following graph sets forth the closing levels of the SX5E from April 2, 2009 through April 2, 2019, as reported by Bloomberg Financial Markets. The historical performance of this Underlying Index should not be taken as an indication of future performance.

The MSCI Emerging Markets Index

The MXEF is intended to measure equity market performance in the global emerging markets. The MXEF is a free float-adjusted market capitalization index with a base date of December 31, 1987 and an initial value of 100. The MXEF 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. As part of the first step of the inclusion process, which resulted from the May 2018 quarterly index review, MSCI added such large cap China A shares to the MSCI Emerging Markets Index at 2.5% of their foreign inclusion factor-adjusted market capitalization. In connection with the August 2018 quarterly index review, MSCI implemented the second step of the inclusion process by increasing the foreign inclusion factor-adjusted market capitalization of those existing China A share constituents from 2.5% to 5%. With the implementation of this second step, and the inclusion of additional China A shares in connection with the August 2018 quarterly index review, China A shares were initially expected to represent approximately 0.75% of the MSCI Emerging Markets Index. In February 2019, MSCI announced a three-step process between May 2019 and November 2019 that would increase the number of Chinese A Shares in the MXEF.

MSCI has announced that, beginning in June 2019, it expects to include the MSCI Saudi Arabia Index in the MSCI Emerging Markets Index, representing on a pro forma basis a weight of approximately 2.6% of the MSCI Emerging Markets Index with 32 securities, following a two-step inclusion process. The first inclusion step is expected to coincide with the May 2019 semi-annual review and the second inclusion step is expected to take place as part of the August 2019 quarterly index review. In addition, MSCI has announced the reclassification of the MSCI Argentina Index from a “frontier market” to an “emerging market”, and the MSCI Argentina Index is expected to be included in the MSCI Emerging Markets Index coinciding with the May 2019 semi-annual index review. MSCI expects to continue to restrict the inclusion in the MSCI Argentina Index to only foreign listings of Argentinian companies, such as American depositary receipts.

The MXEF is part of the MSCI Regional Equity Indices series and is an MSCI Global Investable Market Index, which is a family within the MSCI International Equity Indices.

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, are eligible for inclusion in the equity universe. Conversely, mutual funds, ETFs, equity derivatives, and most investment trusts, are not.

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

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 (i) 5% of the free float-adjusted market capitalization of the relevant MSCI Country Investable Market Index and (ii) 0.05% of the free-float adjusted market capitalization of the MSCI ACWI Investable Market Index.

Determining the Market Investable Equity Universes. A market investable equity universe for a market is derived by identifying eligible listings for each security in the equity universe, and by applying 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. The size requirement also applies to companies in all developed and emerging markets.
- § 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 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 S&P Dow Jones Indexes, 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 Index

The performance of the 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 the case of a 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, 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;
· 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.

None of us, UBS or any of our respective affiliates accepts any responsibility for the calculation, maintenance, or publication of, or for any error, omission, or disruption in, the MXEF any successor to the MXEF.

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 MXEF) in connection with certain securities, including the Securities offered hereby.

The license agreement between us and MSCI requires that the following language be stated in this document:

The Securities are not sponsored, endorsed, sold or promoted by MSCI or any affiliate of MSCI. Neither MSCI nor any other party makes any representation or warranty, express or implied, to the owners of the Securities or any member of the public regarding the advisability of investing in Securities generally or in the Securities or the ability of the MSCI World Index to track general stock market performance. MSCI is the licensor of certain trademarks, service marks and trade names of MSCI and of the MSCI World Index, which is determined, composed and calculated by MSCI without regard to the securities or Royal Bank of Canada. MSCI has no obligation to take the needs of Royal Bank of Canada or the owners of the Securities into consideration in determining, composing or calculating the MSCI World Index. MSCI is not responsible for and has not participated in the determination of the timing of, pricing at or quantities of the Securities or in the determination or calculation of the equation by which the Securities are redeemable for cash. Neither MSCI nor any other party has any obligation or liability to owners of the Securities in connection with the administration, marketing or trading of the Securities.

ALTHOUGH MSCI SHALL OBTAIN INFORMATION FOR INCLUSION IN OR FOR USE IN THE CALCULATION OF THE MSCI WORLD INDEX FROM SOURCES WHICH MSCI CONSIDERS RELIABLE, NEITHER MSCI NOR ANY OTHER PARTY GUARANTEES THE ACCURACY AND/OR THE COMPLETENESS OF THE MSCI WORLD INDEX OR ANY DATA INCLUDED THEREIN. NEITHER MSCI NOR ANY OTHER PARTY MAKES ANY WARRANTY, EXPRESS OR IMPLIED, AS TO RESULTS TO BE OBTAINED BY LICENSEE, LICENSEE'S CUSTOMERS OR COUNTERPARTIES, OWNERS OF THE PRODUCTS OR ANY OTHER PERSON OR ENTITY FROM THE USE OF THE MSCI WORLD INDEX OR ANY DATA INCLUDED THEREIN IN CONNECTION WITH THE RIGHTS LICENSED HEREUNDER OR FOR ANY OTHER USE. FURTHER, NEITHER MSCI NOR ANY OTHER PARTY MAKES ANY EXPRESS OR

IMPLIED WARRANTIES AND MSCI HEREBY EXPRESSLY DISCLAIMS ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE MSCI WORLD INDEX AND ANY DATA INCLUDED THEREIN. NEITHER MSCI NOR ANY OTHER PARTY SHALL HAVE ANY LIABILITY FOR ANY ERRORS, OMISSIONS OR INTERRUPTIONS OF OR IN CONNECTION WITH THE MSCI WORLD INDEX OR ANY DATA INCLUDED THEREIN. WITHOUT LIMITING ANY OF THE FOREGOING, IN NO EVENT SHALL MSCI OR ANY OTHER PARTY HAVE ANY LIABILITY FOR ANY DIRECT, INDIRECT, SPECIAL, PUNITIVE, CONSEQUENTIAL OR ANY OTHER DAMAGES (INCLUDING LOST PROFITS) EVEN IF NOTIFIED OF THE POSSIBILITY OF SUCH DAMAGES. No purchaser, seller or holder of the Securities, or any other person or entity, should use or refer to any MSCI trade name, trade mark or service mark rights to sponsor, endorse, market or promote the Securities without first contacting MSCI to determine whether MSCI's permission is required. Under no circumstances may any person or entity claim affiliation with MSCI without the prior written permission of MSCI.

Historical Information

The following graph sets forth the closing levels of the MXEF from April 2, 2009 through April 2, 2019, as reported by Bloomberg Financial Markets. The historical performance of this Underlying Index should not be taken as an indication of future performance.

Information About the ADSs

Included on the following pages is a brief description of each ADS. This information has been obtained from publicly available sources. We obtained the closing price information set forth below for the ADSs from the Bloomberg Professional® service ("Bloomberg") without independent verification. You should not take the historical prices of any ADS as an indication of future performance.

Each ADS is registered under the Securities Exchange Act of 1934, as amended (the "Exchange Act"). Companies with securities registered under the Exchange Act are required to periodically file financial and other information specified by the SEC. Information filed by the applicable ADS with the SEC can be reviewed electronically through a website maintained by the SEC. The address of the SEC's website is http://www.sec.gov. Information filed with the SEC by the issuer of the applicable ADS under the Exchange Act can be located by reference to its SEC Central Index Key ("CIK") number provided below. Information from outside sources is not incorporated by reference in, and should not be considered part of, this pricing supplement or any accompanying prospectus or prospectus supplement. We have not independently verified the accuracy or completeness of the information contained in outside sources.

According to publicly available information, Alibaba Group Holding Limited, through its subsidiaries, provides Internet infrastructure, e-commerce, online financial, and Internet content services through its subsidiaries. Information filed by the company with the SEC under the Exchange Act can be located by reference to its SEC CIK number: 1577552. The company's ADSs are listed on the New York Stock Exchange ("NYSE") under the ticker symbol "BABA."

According to publicly available information, Baidu, Inc. operates an Internet search engine. The company offers algorithmic search, enterprise search, pay for performance and news, MP3, and image searches. Information filed by the company with the SEC under the Exchange Act can be located by reference to its SEC CIK number: 1329099. The company's ADSs are listed on the Nasdaq under the ticker symbol "BIDU."

The following graph sets forth the closing prices of BABA from September 18, 2014 (the date that it commenced trading) through April 2, 2019, as reported by Bloomberg Financial Markets. The historical performance of this Basket Component should not be taken as an indication of future performance.

The following graph sets forth the closing prices of BIDU from April 2, 2009 through April 2, 2019, as reported by Bloomberg Financial Markets. The historical performance of this Basket Component should not be taken as an indication of future performance.

20

Use of Proceeds and Hedging

The net proceeds we receive from the sale of the Securities will be used for general corporate purposes and, in part, by us or by one or more of our affiliates in connection with hedging our obligations under the Securities. The original issue price of the Securities includes the underwriting commission (as shown on the cover page of this document) paid with respect to the Securities and the estimated cost of hedging our obligations under the Securities.

In anticipation of the sale of the Securities, we expect to enter into hedging transactions with one or more of our affiliates involving the Basket Components or the securities represented by the Basket Components, and/or related listed and/or over-the-counter derivative instruments prior to or on the Trade Date. From time to time, including around the time of the maturity date, we and our respective affiliates may enter into additional hedging transactions or unwind those that we or they have entered into. In this regard, we and our respective affiliates may:

§ acquire or dispose of investments relating to the Basket Components;

§ acquire or dispose of long or short positions in listed or over-the-counter derivative instruments related to the Basket Components; or

§ any combination of the above two.

We and our affiliates may acquire a long or short position in securities similar to the Securities from time to time and may, in our or their sole discretion, hold or resell those similar securities.

We and our affiliates may close out our or their hedges at any time during the term of the Securities. That step may, for example, involve sales or purchases of over-the-counter derivative instruments linked to the Basket Components.

Additional Terms of the Securities Relating to Underlying Indices

General

A "closing level" of an Underlying Index or any successor index will be the official closing level of the applicable Underlying Index or any successor index published following the regular official weekday close of trading on the applicable trading day, as determined by the calculation agent.

A "trading day" as to any Underlying Index is a day, as determined by the calculation agent, on which trading is generally conducted on (i) the relevant exchanges (as defined below) for securities included in the applicable Underlying Index or the successor index and (ii) the exchanges on which futures or options contracts related to that Underlying Index or the successor index are traded, other than a day on which trading on such relevant exchange or exchange on which such futures or options contracts are traded is scheduled to close prior to its regular weekday closing time.

As to any Underlying Index, if the Final Valuation Date is not a trading day or if there is a market disruption event on that day, the Final Valuation Date will be postponed to the immediately succeeding trading day during which no market disruption event shall have occurred or be continuing. In no event, however, will the Final Valuation Date be postponed more than ten business days following the date originally scheduled. If the tenth business day following the date originally scheduled to be the Final Valuation Date is not a trading day, or if there is a market disruption event on that date, the calculation agent will determine the closing level for the applicable Underlying Index in accordance with the formula for and method of calculating that Underlying Index last in effect prior to commencement of the market disruption event (or prior to the non-trading day), using the closing price (or, if trading in the relevant securities has been materially suspended or materially limited, the calculation agent's good faith estimate of the closing price that would have prevailed but for such suspension or limitation or non-trading day) on that tenth scheduled business day of each security most recently constituting that Underlying Index.

For the avoidance of doubt, if an Underlying Index is subject to a non-trading day or market disruption event only the closing level of that Underlying Index shall be postponed; the closing level of any Basket Component that is not so affected shall be determined on the scheduled Final Valuation Date.

If, due to a market disruption event or otherwise, the Final Valuation Date is postponed, the maturity date will be postponed by the same number of business days. However, if the Final Valuation Date is postponed so that it falls less than three business days prior to the scheduled maturity date, the maturity date will be the third business day following the Final Valuation Date, as so postponed.

Market Disruption Events

Certain events may prevent the calculation agent from determining the closing level of each Underlying Index, and consequently, the amount, if any, that we will pay to you on the Securities. These events may include disruptions or suspensions of trading on the markets as a whole. We refer to each of these events individually as a “market disruption event.”

With respect to any Underlying Index and any relevant successor index, a “market disruption event,” means:

- § a suspension, absence or material limitation of trading of equity securities then constituting 20% or more of the level of the Underlying Index (or the relevant successor index) on the relevant exchanges (as defined below) for such securities for more than two hours of trading during, or during the one hour period preceding the close of, the principal trading session on such relevant exchange; or
- § a breakdown or failure in the price and trade reporting systems of any relevant exchange as a result of which the reported trading prices for equity securities then constituting 20% or more of the level of the Underlying Index (or the relevant successor index) during the one hour preceding the close of the principal trading session on such relevant exchange are materially inaccurate; or
- § a suspension, absence or material limitation of trading on the primary exchange or market for trading in futures or options contracts related to the Underlying Index (or the relevant successor index) for more than two hours of trading during, or during the one hour period preceding the close of, the principal trading session on such exchange or market; or
- § a decision to permanently discontinue trading in the relevant futures or options contracts;

in each case as determined by the calculation agent in its sole discretion; and

- § a determination by the calculation agent in its sole discretion that the event described above materially interfered with our ability or the ability of any of our affiliates to adjust or unwind all or a material portion of any hedge with respect to the Securities.

For purposes of determining whether a market disruption event with respect to any Underlying Index (or the relevant successor index) exists at any time, if trading in a security included in the Underlying Index (or the relevant successor index) is materially suspended or materially limited at that time, then the relevant percentage contribution of that security to the level of the Underlying Index (or the relevant successor index) will be based on a comparison of:

- § the portion of the level of the Underlying Index (or the relevant successor index) attributable to that security relative to
- § the overall level of the Underlying Index (or the relevant successor index),

in each case immediately before that suspension or limitation.

For purposes of determining whether a market disruption event with respect to any Underlying Index (or the relevant successor index) has occurred:

- § a limitation on the hours or number of days of trading will not constitute a market disruption event if it results from an announced change in the regular business hours of the relevant exchange, or the primary exchange or market for trading in futures or options contracts related to the Underlying Index (or the relevant successor index);
- § limitations pursuant to the rules of any relevant exchange similar to NYSE Rule 80B (or any applicable rule or regulation enacted or promulgated by any other self-regulatory organization or any government agency of scope similar to NYSE Rule 80B as determined by the calculation agent) on trading during significant market fluctuations will constitute a suspension, absence or material limitation of trading;
- § a suspension of trading in futures or options contracts on the Underlying Index (or the relevant successor index) by the primary exchange or market trading in such contracts by reason of
  - · a price change exceeding limits set by such exchange or market,
  - · an imbalance of orders relating to such contracts, or
  - · a disparity in bid and ask quotes relating to such contracts

will, in each such case, constitute a suspension, absence or material limitation of trading in futures or options contracts related to the Underlying Index (or the relevant successor index); and

- § a "suspension, absence or material limitation of trading" on any relevant exchange or on the primary exchange or market on which futures or options contracts related to the Underlying Index (or the relevant successor index) are traded will not include any time when such exchange or market is itself closed for trading under ordinary circumstances.

"Relevant exchange" means, with respect to any Underlying Index or any relevant successor index, the primary exchange or market of trading for any security (or any combination thereof) then included in that Underlying Index or such successor index, as applicable.

Discontinuation of an Underlying Index; Alteration of Method of Calculation

If the index sponsor of an Underlying Index discontinues publication of that Underlying Index and the index sponsor or another entity publishes a successor or substitute index that the calculation agent determines, in its sole discretion, to be comparable to the discontinued Underlying Index (such index being referred to herein as a "successor index"), then the closing levels of that Underlying Index will be determined by reference to the level of such successor index at the close of trading on the relevant exchange for the successor index on such day.

Upon any selection by the calculation agent of a successor index, the calculation agent will cause written notice to be promptly furnished to the trustee, to us and to the holders of the Securities.

If an index sponsor discontinues publication of an Underlying Index prior to, and that discontinuation is continuing on or prior to the Final Valuation Date, and the calculation agent determines, in its sole discretion, that no successor index is available at that time or the calculation agent has previously selected a successor index and publication of that successor index is discontinued prior to, and that discontinuation is continuing on, the applicable trading day, then the calculation agent will determine the closing level of that Underlying Index for that date. The closing level will be computed by the calculation agent in accordance with the formula for and method of calculating that Underlying Index or successor index, as applicable, last in effect prior to the discontinuation, using the closing price (or, if trading in the relevant securities has been materially suspended or materially limited, the calculation agent's good faith estimate of the closing price that would have prevailed but for the suspension or limitation) at the close of the principal trading session on that date of each security most recently included in the Underlying Index or successor index, as applicable. Notwithstanding these alternative arrangements, discontinuation of the publication of the Underlying Index or successor index, as applicable, may adversely affect the value of the Securities.

If at any time the method of calculating an Underlying Index or a successor index, or the level thereof, is changed in a material respect, or if an Underlying Index or a successor index is in any other way modified so that the Underlying Index or successor index does not, in the opinion of the calculation agent, fairly represent the level of the Underlying Index or successor index had those changes or modifications not been made, then the calculation agent will, at the close of business in New York City on the date on any date on which the closing level of the Underlying Index is to be determined, make any calculations and adjustments as, in the good faith judgment of the calculation agent, may be necessary in order to arrive at a level of a stock index comparable to the Underlying Index or successor index, as the case may be, as if those changes or modifications had not been made, and calculate the closing level with reference to the Underlying Index or such successor index, as adjusted. Accordingly, if the method of calculating an Underlying Index or a successor index is modified so that the level of the Underlying Index or such successor index is a fraction of what it would have been if there had been no such modification (e.g., due to a split in the Underlying Index), then the calculation agent will adjust its calculation of the Underlying Index or such successor index in order to arrive at a level of the Underlying Index or such successor index as if there had been no such modification (e.g., as if such split had not occurred).

What Are the Tax Consequences of the Securities?

U.S. Federal Income Tax Consequences

Set forth below, together with the discussion of U.S. federal income tax in the accompanying product prospectus supplement, prospectus supplement, and prospectus, is a summary of the material U.S. federal income tax consequences relating to an investment in the Securities. The following summary supplements, and to the extent inconsistent supersedes, the discussion under the section entitled "Supplemental Discussion of U.S. Federal Income Tax Consequences" in the accompanying product prospectus supplement, the section entitled "Certain Income Tax Consequences" in the accompanying prospectus supplement, and the section entitled "Tax Consequences" in the accompanying prospectus, which you should carefully review prior to investing in the Securities.

In the opinion of our counsel, Morrison & Foerster LLP, it would generally be reasonable to treat the Securities as pre-paid cash-settled derivative contracts in respect of the Basket for U.S. federal income tax purposes, and the terms of the Securities require a holder and us (in the absence of a change in law or an administrative or judicial ruling to the contrary) to treat the Securities for all tax purposes in accordance with such characterization. If the Securities are so treated, subject to the discussion in the accompanying product prospectus supplement concerning the potential application of the "constructive ownership" rules under Section 1260 of the Code, a U.S. holder should generally recognize capital gain or loss upon the sale or maturity of the Securities in an amount equal to the difference between the amount a holder receives at such time and the holder's tax basis in the Securities. Capital gain recognized by an individual U.S. holder is generally taxed at preferential rates where the property is held for more than one year and is generally taxed at ordinary income rates where the property is held for one year or less. The deductibility of capital losses is subject to limitations.

Alternative tax treatments are also possible and the Internal Revenue Service (the "IRS") might assert that a treatment other than that described above is more appropriate. In addition, the IRS has released a notice that may affect the taxation of holders of the Securities. According to the notice, the IRS and the U.S. Treasury Department are actively considering whether the holder of an instrument such as the Securities should be required to accrue ordinary income on a current basis. It is not possible to determine what guidance they will ultimately issue, if any. It is possible, however, that under such guidance, holders of the Securities will ultimately be required to accrue income currently and this could be applied on a retroactive basis. The IRS and the U.S. Treasury Department are also considering other relevant issues, including whether additional gain or loss from such instruments should be treated as ordinary or capital and whether the special "constructive ownership rules" of Section 1260 of the Code might be applied to such instruments. Holders are urged to consult their tax advisors concerning the significance, and the potential impact, of the above considerations.

If an Underlying Index periodically rebalances, it is possible that the Securities could be treated as a series of derivative contracts, each of which matures on the next rebalancing date. If the Securities were properly characterized in such a manner, a holder would be treated as disposing of the Securities on each rebalancing date in return for new derivative contracts that mature on the next rebalancing date, and a holder would accordingly likely recognize capital gain or loss on each rebalancing date equal to the difference between the holder's basis in the Securities (which would be adjusted to take into account any prior recognition of gain or loss) and the fair market value of the securities on such date.

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 Securities are not delta-one instruments, non-U.S. holders should not be subject to withholding on dividend equivalent payments, if any, under the Securities. However, it is possible that the Securities could be treated as deemed reissued for U.S. federal income tax purposes upon the occurrence of certain events, and following such occurrence the Securities 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 Underlying or the Securities should consult their tax advisors as to the application of the dividend equivalent withholding tax in the context of the Securities 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.

Individual holders that own “specified foreign financial assets” may be required to include certain information with respect to such assets with their U.S. federal income tax return. You are urged to consult your own tax advisor regarding such requirements with respect to the Securities.

Please see the discussion under the section entitled “Supplemental Discussion of U.S. Federal Income Tax Consequences” in the accompanying product prospectus supplement for a further discussion of the U.S. federal income tax consequences of an investment in the Securities.

We will not attempt to ascertain whether the issuer of any of the stocks represented by the Basket Components would be treated as a “passive foreign investment company” within the meaning of Section 1297 of the Code or a “U.S. real property holding corporation” within the meaning of Section 897 of the Code. If the issuer of one or more such stocks were so treated, certain adverse U.S. federal income tax consequences could possibly apply. You should refer to any available information filed with the SEC and other authorities by the issuers of the securities represented by the Basket Components and consult your tax advisor regarding the possible consequences to you in this regard.

Canadian Federal Income Tax Consequences

For a discussion of the material Canadian federal income tax consequences relating to an investment in the Securities, please see the section entitled “Tax Consequences—Canadian Taxation” in the accompanying prospectus, which you should carefully review prior to investing in the Securities.

Supplemental Plan of Distribution (Conflicts of Interest)

We have agreed to indemnify UBS and RBCCM against liabilities under the Securities Act of 1933, as amended, or to contribute payments that UBS and RBCCM may be required to make relating to these liabilities as described in the prospectus supplement and the prospectus. We have agreed that UBS may sell all or a part of the Securities that it will purchase from us to investors at the price to public listed on the cover hereof, or its affiliates at the price indicated on the cover of this pricing supplement.

UBS may allow a concession not in excess of the underwriting discount set forth on the cover of this pricing supplement to its affiliates for distribution of the Securities.

We expect to deliver the Securities 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 Securities more than two business days prior to the original issue date will be required to specify alternative settlement arrangements to prevent a failed settlement.

Subject to regulatory constraints and market conditions, RBCCM intends to offer to purchase the Securities in the secondary market, but it is not required to do so.

We or our affiliates may enter into swap agreements or related hedge transactions with one of our other affiliates or unaffiliated counterparties in connection with the sale of the Securities and RBCCM and/or an affiliate may earn additional income as a result of payments pursuant to the swap or related hedge transactions. See “Use of Proceeds and Hedging” above.

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

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.

Structuring the Securities

The Securities are our debt securities, the return on which is linked to the performance of the Basket. As is the case for all of our debt securities, including our structured notes, the economic terms of the Securities 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 Securities 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 a secondary market rate is a factor that resulted in a higher initial estimated value of the Securities at the time their terms are set than if a secondary market rate was used. Unlike the estimated value included on the cover of this document, any value of the Securities determined for purposes of a secondary market transaction may be based on a different borrowing rate, which may result in a lower value for the Securities than if our initial internal borrowing rate were used.

In order to satisfy our payment obligations under the Securities, 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 each Basket Component, and the tenor of the

Securities. The economic terms of the Securities and their initial estimated value depend in part on the terms of these hedging arrangements.

The lower implied borrowing rate is a factor that reduces the economic terms of the Securities to you. The initial offering price of the Securities also reflects the underwriting discount and our estimated hedging costs. These factors result in the initial estimated value for the Securities on the Trade Date being less than their public offering price. See "Key Risks—The Initial Estimated Value of the Securities Is Less than the Price to the Public" above.

Terms Incorporated in Master Note

The terms appearing above under the caption "Final Terms of the Securities" and the provisions in the accompanying product prospectus supplement UBS-EQUITY-1 dated September 7, 2018 under the caption "General Terms of the Securities," are incorporated into the master note issued to DTC, the registered holder of the Securities.

Validity of the Securities

In the opinion of Norton Rose Fulbright Canada LLP, the issue and sale of the Securities has been duly authorized by all necessary corporate action of the Bank in conformity with the Indenture, and when the Securities have been duly executed, authenticated and issued in accordance with the Indenture and delivered against payment therefor, the Securities will be validly issued and, to the extent validity of the Securities 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 Securities 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 Securities have been duly completed in accordance with the Indenture and issued and sold as contemplated by the prospectus supplement and the prospectus, the Securities 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.