ROYAL BANK OF CANADA
Form 424B2
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PRICING SUPPLEMENT
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Dated May 4, 2018
Royal Bank of Canada Trigger Autocallable Contingent Yield Notes
$4,698,800 Notes Linked to the SPDR® S&P® Bank ETF due on May 7, 2020

Investment Description

Trigger Autocallable Contingent Yield Notes (the "Notes") are unsecured and unsubordinated debt securities issued by Royal Bank of Canada linked to the performance of the SPDR® S&P® Bank ETF (the "Underlying"). We will pay a quarterly Contingent Coupon payment if the closing price of the Underlying on the applicable Coupon Observation Date is equal to or greater than the Coupon Barrier. Otherwise, no coupon will be paid for that quarter. We will automatically call the Notes early if the closing price of the Underlying on any Call Observation Date (beginning after six months) is equal to or greater than the Initial Price. If the Notes are called, we will pay you the principal amount of your Notes plus the Contingent Coupon for that quarter and no further amounts will be owed to you under the Notes. If the Notes are not called prior to maturity and the Final Price of the Underlying is equal to or greater than the Downside Threshold (which is the same price as the Coupon Barrier), we will pay you a cash payment at maturity equal to the principal amount of your Notes plus the Contingent Coupon for the final quarter. If the Final Price of the Underlying is less than the Downside Threshold, we will pay you less than the full principal amount, if anything, resulting in a loss on your initial investment that is proportionate to the negative performance of the Underlying over the term of the Notes, and you may lose up to 100% of your initial investment.
Investing in the Notes involves significant risks. You may lose some or all of your principal amount. The contingent repayment of principal only applies if you hold the Notes until maturity. Generally, the higher the Contingent Coupon Rate on the Notes, the greater the risk of loss on the Notes. Any payment on the Notes, 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 Notes and you could lose your entire investment. The Notes will not be listed on any securities exchange.

Features Key Dates

q Contingent Coupon — We will pay a quarterly Contingent Coupon payment if the closing price of the Underlying on the applicable Coupon Observation Date is equal to or greater than the Coupon Barrier. Otherwise, no coupon will be paid for the quarter.

q Automatically Callable — We will automatically call the Notes and pay you the principal amount of your Notes plus the Contingent Coupon otherwise due for the applicable quarter if the closing price of the Underlying on any quarterly Call Observation Date (beginning after six months) is greater than or equal to the Initial Price. If the Notes are not called, investors will have the potential for downside equity market risk at maturity.

q Contingent Repayment of Principal at Maturity— If by maturity the Notes have not been called and the price of the Underlying does not close below the Downside Threshold on the Final Valuation Date, we will repay your principal amount per Note at maturity. If the price of the Underlying closes below the Downside Threshold on the Final Valuation Date, we will pay less than the principal amount, if anything, resulting in a loss on your initial investment that is proportionate to the decline in the price of the Underlying from the Trade Date to the Final Valuation Date. The contingent repayment of principal only applies if you hold the Notes until maturity. Any payment on the Notes, including any repayment of principal, is subject to our creditworthiness.

Trade Date May 4, 2018
Settlement Date May 9, 2018
Coupon Observation Dates[1] Quarterly (see page 6)
Call Observation Dates[1] Quarterly (callable after 6 months) (see page 6)
Final Valuation Date[1] May 4, 2020

Maturity Date[1] May 7, 2020

[1] Subject to postponement if a market disruption event occurs and as described under "General Terms of the Securities — Payment at Maturity" in the accompanying product prospectus supplement no. UBS-TPAOS-2.

NOTICE TO INVESTORS: THE NOTES ARE SIGNIFICANTLY RISKIER THAN CONVENTIONAL DEBT INSTRUMENTS. WE ARE NOT NECESSARILY OBLIGATED TO REPAY THE FULL PRINCIPAL AMOUNT OF THE NOTES AT MATURITY, AND THE NOTES CAN HAVE DOWNSIDE MARKET RISK SIMILAR TO THE UNDERLYING. THIS MARKET RISK IS IN ADDITION TO THE CREDIT RISK INHERENT IN PURCHASING OUR DEBT OBLIGATION. YOU SHOULD NOT PURCHASE THE NOTES IF YOU DO NOT UNDERSTAND OR ARE NOT COMFORTABLE WITH THE SIGNIFICANT RISKS INVOLVED IN INVESTING IN THE NOTES.

YOU SHOULD CAREFULLY CONSIDER THE RISKS DESCRIBED UNDER ''KEY RISKS" BEGINNING ON PAGE 7 OF THIS PRICING SUPPLEMENT, UNDER "RISK FACTORS" BEGINNING ON PAGE PS-5 OF THE PRODUCT PROSPECTUS SUPPLEMENT NO. UBS-TPAOS-2 AND UNDER ''RISK FACTORS'' BEGINNING ON PAGE S-1 OF THE PROSPECTUS SUPPLEMENT BEFORE PURCHASING ANY NOTES. EVENTS RELATING TO ANY OF THOSE RISKS, OR OTHER RISKS AND UNCERTAINTIES, COULD ADVERSELY AFFECT THE MARKET VALUE OF, AND THE RETURN ON, YOUR NOTES. YOU MAY LOSE SOME OR ALL OF YOUR INITIAL INVESTMENT IN THE NOTES.

Note Offering

We are offering Trigger Autocallable Contingent Yield Notes linked to the shares of the SPDR® S&P® Bank ETF. The Notes will be issued in minimum denominations of $10.00, and integral multiples of $10.00 in excess thereof, with a minimum investment of $1,000.00.

Underlying	Contingent Coupon Rate	Initial Price	Downside Threshold*	Coupon Barrier*	CUSIP	ISIN
SPDR® S&P® Bank ETF (KBE)	7.70% per annum	$48.38	$38.70, which is 80.00% of the Initial Price	$38.70, which is 80.00% of the Initial Price	78013Q723	US78013Q7236

*Rounded to two decimal places

See "Additional Information About Royal Bank of Canada and the Notes" in this pricing supplement. The Notes will have the terms specified in the prospectus dated January 8, 2016, the prospectus supplement dated January 8, 2016, product prospectus supplement no. UBS-TPAOS-2 dated January 20, 2016 and this pricing supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the Notes or passed upon the accuracy or the adequacy of this pricing supplement or the accompanying prospectus, prospectus supplement and product prospectus supplement no. UBS-TPAOS-2. Any representation to the contrary is a criminal offense.

	Price to Public		Fees and Commissions(1)		Proceeds to Us	
Offering of the Notes	Total	Per Note	Total	Per Note	Total	Per Note
Notes linked to the SPDR® S&P® Bank ETF (KBE)	$4,698,800.00	$10.00	$70,482.00	$0.15	$4,628,318.00	$9.85

(1) UBS Financial Services Inc., which we refer to as UBS, will receive a commission of $0.15 per $10.00 principal amount of the Notes. See "Supplemental Plan of Distribution (Conflicts of Interest)" below.

The initial estimated value of the Notes as of the date of this document is $9.8000 per $10 in principal amount, which is less than the price to public. The actual value of the Notes at any time will reflect many factors, cannot be predicted with accuracy, and may be less than this amount. We describe our determination of the initial estimated value under "Key Risks," "Supplemental Plan of Distribution (Conflicts of Interest)" and "Structuring the Notes" below.

The Notes 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 Notes

You should read this pricing supplement together with the prospectus dated January 8, 2016, as supplemented by the prospectus supplement dated January 8, 2016, relating to our senior global medium-term notes, Series G, of which these Notes are a part, and the more detailed information contained in product prospectus supplement no. UBS-TPAOS-2 dated January 20, 2016. This pricing supplement, together with the documents listed below, contains the terms of the Notes 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 no. UBS-TPAOS-2, as the Notes 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 no. UBS-TPAOS-2, the prospectus supplement, or the prospectus, the terms discussed herein will control. Please note in particular that several defined terms in the product prospectus supplement are replaced in this document with different terms:

- instead of "Starting Price" in the product prospectus supplement, the term "Initial Price" is used in this document;
- instead of "Ending Price" in the product prospectus supplement, the term "Final Price" is used in this document;
- instead of "Trigger Price" in the product prospectus supplement, the term "Downside Threshold" is used in this document;
- instead of "Underlying Equity" in the product prospectus supplement, the term "Underlying" is used in this document; and
- instead of "final Observation Date" in the product prospectus supplement, the term "Final Valuation Date" is used in this document.

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 no. UBS-TPAOS-2 dated January 20, 2016:
https://www.sec.gov/Archives/edgar/data/1000275/000114036116048191/form424b5.htm
- Prospectus supplement dated January 8, 2016:
http://www.sec.gov/Archives/edgar/data/1000275/000121465916008811/p14150424b3.htm
- Prospectus dated January 8, 2016:
http://www.sec.gov/Archives/edgar/data/1000275/000121465916008810/j18160424b3.htm

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

Investor Suitability

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

- You fully understand the risks inherent in an investment in the Notes, including the risk of loss of your entire initial investment.
- You can tolerate a loss of all or a substantial portion of your investment and are willing to make an investment that may have the same downside market risk as an investment in the Underlying.
- You believe the closing price of the Underlying will be equal to or greater than the Coupon Barrier on most or all of the Coupon Observation Dates (including the Final Valuation Date).
- You are willing to invest in the Notes based on the Contingent Coupon Rate specified on the cover page of this pricing supplement.
- You do not seek guaranteed current income from this investment and are willing to forgo the dividends paid on the equity securities held by the Underlying.
- You can tolerate fluctuations in the price of the Notes prior to maturity that may be similar to or exceed the downside price fluctuations of the Underlying.
- You are willing to invest in Notes for which there may be little or no secondary market and you accept that the secondary market will depend in large part on the price, if any, at which RBC Capital Markets, LLC, which we refer to as "RBCCM," is willing to purchase the Notes.
- You are willing to invest in the Notes based on the Downside Threshold and Coupon Barrier specified on the cover page of this pricing supplement.
- You understand and accept the risks associated with the Underlying.
- You are willing to invest in securities that may be called early and you are otherwise willing to hold such securities to maturity.
- You are willing to assume our credit risk for all payments under the Notes, and understand that if we default on our obligations, you may not receive any amounts due to you, including any repayment of principal.

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

- You do not fully understand the risks inherent in an investment in the Notes, including the risk of loss of your entire initial investment.
- You cannot tolerate a loss on your investment and require an investment designed to provide a full return of principal at maturity.
- You are not willing to make an investment that may have the same downside market risk as an investment in the Underlying.
- You believe that the price of the Underlying will decline during the term of the Notes and is likely to close below the Coupon Barrier on most or all of the Coupon Observation Dates and below the Downside Threshold on the Final Valuation Date.
- You are unwilling to invest in the Notes based on the Contingent Coupon Rate specified on the cover page of this pricing supplement.
- You seek an investment that participates in the full appreciation in the price of the Underlying or that has unlimited return potential.
- You cannot tolerate fluctuations in the price of the Notes prior to maturity that may be similar to or exceed the downside price fluctuations of the Underlying.
- You are unwilling to invest in the Notes based on the Downside Threshold and Coupon Barrier specified on the cover page of this pricing supplement.
- You do not understand or accept the risks associated with the Underlying.
- You seek guaranteed current income from this investment or prefer to receive the dividends paid on the Underlying.
- You are unable or unwilling to hold securities that may be called early, or you are otherwise unable or unwilling to hold such securities to maturity or you seek an investment for which there will be an active secondary market for the Notes.
- You are not willing to assume our credit risk for all payments under the Notes, including any repayment of principal.

The suitability considerations identified above are not exhaustive. Whether or not the Notes 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 Notes in light of your particular circumstances. You should also review carefully the “Key Risks” below and “Risk Factors” in the accompanying product prospectus supplement no. UBS-TPAOS-2 for risks related to an investment in the Notes. In addition, you should review carefully the section below, “Information About the Underlying” for more information about the Underlying.

Final Terms of the Notes[1]

Issuer:	Royal Bank of Canada
Principal Amount per Note:	\$10.00 per Note
Term:	Approximately two years, if not previously called
Underlying:	The shares of the SPDR® S&P® Bank ETF
Closing Price:	On any trading day, the last reported sale price of the Underlying on the principal national securities exchange in the U.S. on which it is listed for trading, as determined by the calculation agent.
Initial Price:	The closing price of the Underlying on the Trade Date.
Final Price:	The closing price of the Underlying on the Final Valuation Date.
Contingent Coupon:	If the closing price of the Underlying is equal to or greater than the Coupon Barrier on any Coupon Observation Date, we will pay you the Contingent Coupon applicable to that Coupon Observation Date. If the closing price of the Underlying is less than the Coupon Barrier on any Coupon Observation Date, the Contingent Coupon applicable to that Coupon Observation Date will not accrue or be payable and we will not make any payment to you on the relevant Contingent Coupon Payment Date. The Contingent Coupon will be a fixed amount based upon equal quarterly installments at the Contingent Coupon Rate, which is a per annum rate as set forth below.

Contingent Coupon payments on the Notes are not guaranteed. We will not pay you the Contingent Coupon for any Coupon Observation Date on which the closing price of the Underlying is less than the Coupon Barrier.

Contingent Coupon Rate:	7.70%per annum (1.925% per quarter).
Coupon Barrier:	80.00% of the Initial Price (as may be adjusted in the case of certain adjustment events as described under “General Terms of the Securities — Anti-dilution Adjustments” in the product prospectus supplement). The Coupon Barrier equals the Downside Threshold.
Downside Threshold:	80.00% of the Initial Price (as may be adjusted in the case of certain adjustment events as described under “General Terms of the Securities — Anti-dilution Adjustments” in the product prospectus supplement). The Downside Threshold equals the Coupon Barrier.
Automatic Call Feature:	The Notes will be called automatically if the closing price of the Underlying on any Call Observation Date (beginning after six months and set forth on page 6) is greater than or equal to the Initial Price. If the Notes are called, we will pay you on the corresponding coupon payment date (which will be the “Call Settlement Date”) a cash payment per Note equal to the principal amount per Note plus the applicable

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

	Contingent Coupon payment otherwise due on that day (the “Call Settlement Amount”). No further amounts will be owed to you under the Notes.
Payment at Maturity:	If the Notes are not called and the Final Price is equal to or greater than the Downside Threshold and the Coupon Barrier, we will pay you a cash payment per Note on the maturity date equal to \$10.00 plus the Contingent Coupon otherwise due on the maturity date. If the Notes are not called and the Final Price is less than the Downside Threshold, we will pay you a cash payment on the maturity date of less than the principal amount, if anything, resulting in a loss on your initial investment that is proportionate to the negative underlying return, equal to: \$10.00 + (\$10.00 × underlying return)
Underlying Return:	$\frac{\text{Final Price} - \text{Initial Price}}{\text{Initial Price}}$

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Investment Timeline

Trade Date:	The Initial Price of the Underlying was observed, and the Contingent Coupon Rate was determined.
Quarterly (beginning after six months):	If the closing price of the Underlying is equal to or greater than the Coupon Barrier on any Coupon Observation Date, we will pay you a Contingent Coupon payment on the applicable coupon payment date. The Notes will be called if the closing price of the Underlying on any Call Observation Date (beginning after six months) is equal to or greater than the Initial Price. If the Notes are called, we will pay you a cash payment per Note equal to \$10 plus the Contingent Coupon otherwise due on that date.
Maturity Date:	The Final Price of the Underlying is observed on the Final Valuation Date. If the Notes have not been called and the Final Price is equal to or greater than the Downside Threshold (and the Coupon Barrier), we will repay the principal amount equal to \$10 per Note plus the Contingent Coupon otherwise due on the maturity date. If the Notes have not been called and the Final Price is less than the Downside Threshold, we will pay less than the principal amount, if anything, resulting in a loss on your initial investment proportionate to the decline of the Underlying, for an amount equal to: \$10 + (\$10 × underlying return) per Note

INVESTING IN THE NOTES INVOLVES SIGNIFICANT RISKS. YOU MAY LOSE SOME OR ALL OF YOUR PRINCIPAL AMOUNT. ANY PAYMENT ON THE NOTES, 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 NOTES AND YOU COULD LOSE YOUR ENTIRE INVESTMENT.

Coupon Observation Dates and Coupon Payment Dates*

Coupon Observation Dates	Coupon Payment Dates
August 6, 2018	August 8, 2018
November 5, 2018[(1)]	November 7, 2018[(2)]
February 4, 2019[(1)]	February 6, 2019[(2)]
May 7, 2019[(1)]	May 9, 2019[(2)]
August 5, 2019[(1)]	August 7, 2019[(2)]
November 4, 2019[(1)]	November 6, 2019[(2)]
February 4, 2020[(1)]	February 6, 2020[(2)]
May 4, 2020[(3)]	May 7, 2020[(4)]

(1) These Coupon Observation Dates are also Call Observation Dates.
(2) These Coupon Payment Dates are also Call Settlement Dates.
(3) This is also the Final Valuation Date.
(4) This is also the maturity date.
* Expected. 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 no. UBS-TPAOS-2.

Key Risks

An investment in the Notes involves significant risks. Investing in the Notes is not equivalent to investing directly in the Underlying. These risks are explained in more detail in the “Risk Factors” section of the accompanying product prospectus supplement no. UBS-TPAOS-2. We also urge you to consult your investment, legal, tax, accounting and other advisors before investing in the Notes.

Risks Relating to the Notes Generally

- Risk of Loss at Maturity — The Notes differ from ordinary debt securities in that we will not necessarily repay the full principal amount of the Notes at maturity. If the Notes are not called, we will repay you the principal amount of your Notes in cash only if the Final Price of the Underlying is greater than or equal to the Downside Threshold, and will only make that payment at maturity. If the Notes are not called and the Final Price is less than the Downside Threshold, you will lose some or all of your initial investment in an amount proportionate to the decline in the price of the Underlying.
- The Contingent Repayment of Principal Applies Only at Maturity — If the Notes are not automatically called, you should be willing to hold your Notes to maturity. If you are able to sell your Notes prior to maturity in the secondary market, if any, you may have to do so at a loss relative to your initial investment, even if the price of the Underlying is above the Downside Threshold.
- You May Not Receive any Contingent Coupons — Royal Bank of Canada will not necessarily make periodic Contingent Coupon payments on the Notes. If the closing price of the Underlying on a Coupon Observation Date is less than the Coupon Barrier, we will not pay you the Contingent Coupon applicable to that Coupon Observation Date. If the closing price of the Underlying is less than the Coupon Barrier on each of the Coupon Observation Dates, we will not pay you any Contingent Coupons during the term of, and you will not receive a positive return on, your Notes. Generally, this non-payment of the Contingent Coupon coincides with a period of greater risk of principal loss on your Notes. Accordingly, if we do not pay the Contingent Coupon on the maturity date, you will incur a loss of principal, because the Final Price will be less than the Downside Threshold.
- The Call Feature and the Contingent Coupon Feature Limit Your Potential Return — The return potential of the Notes is limited to the pre-specified Contingent Coupon Rate, regardless of the appreciation of the Underlying. In addition, the total return on the Notes will vary based on the number of Call Observation Dates on which the Contingent Coupon becomes payable prior to maturity or an automatic call. Further, if the Notes are called due to the automatic call feature, you will not receive any Contingent Coupons or any other payment in respect of any Call Observation Dates after the applicable Call Settlement Date. Since the Notes could be called as early as the first Call Observation Date, the total return on the Notes could be minimal. If the Notes are not called, you may be subject to the full downside performance of the Underlying even though your potential return is limited to the Contingent Coupon Rate. Generally, the longer the Notes are outstanding, the less likely it is that they will be automatically called due to the decline in the price of the Underlying and the shorter time remaining for the price of the Underlying to recover. As a result, the return on an investment in the Notes could be less than the return on a direct investment in the Underlying or on a similar security that allows you to participate in the appreciation of the price of the Underlying.
- The Contingent Coupon Rate Per Annum Payable on the Notes Will Reflect in Part the Volatility of the Underlying, and May Not Be Sufficient to Compensate You for the Risk of Loss at Maturity — "Volatility” refers to the frequency and magnitude of changes in the price of the Underlying. The greater the volatility of the Underlying, the more likely it is that the price of that equity could close below the Downside Threshold on the Final Valuation Date. This risk will generally be reflected in a higher Contingent Coupon Rate for the Notes than the rate payable on our conventional debt securities with a comparable term. However, while the Contingent Coupon Rate was set on the Trade Date, the Underlying’s volatility can change significantly over the term of the Notes, and may increase. The price of the Underlying could fall sharply as of the Final Valuation Date, which could result in a significant loss of your principal.
- The Notes Are Subject to Reinvestment Risk — The Notes will be called automatically if the closing price of the Underlying is equal to or greater than the Initial Price on any Call Observation Date. In the event that the Notes are called prior to maturity, there is no guarantee that you will be able to reinvest the proceeds from an investment in the Notes at a comparable rate of return for a similar level of risk. To the extent you are able to reinvest your proceeds in an investment comparable to the Notes, you will incur transaction costs and the original issue price for such an

investment is likely to include certain built in costs such as dealer discounts and hedging costs.

¨ The Notes Are Subject to Our Credit Risk — The Notes are subject to our credit risk, and our credit ratings and credit spreads may adversely affect the market value of the Notes. Investors are dependent on our ability to pay all amounts due on the Notes, and therefore investors are subject to our credit risk and to changes in the market's view of our creditworthiness. Any decline in our credit ratings or increase in the credit spreads charged by the market for taking our credit risk is likely to adversely affect the value of the Notes. If we were to default on our payment obligations, you may not receive any amounts owed to you under the Notes and you could lose your entire investment.

¨ The Initial Estimated Value of the Notes Is Less than the Price to the Public — The initial estimated value for the Notes that is set forth on the cover page of this document, which is less than the public offering price you pay for the Notes, does not represent a minimum price at which we, RBCCM or any of our other affiliates would be willing to purchase the Notes in any secondary market (if any exists) at any time. If you attempt to sell the Notes prior to maturity, their market value may be lower than the price you paid for them and the initial estimated value. This is due to, among other things, changes in the price of the Underlying, the borrowing rate we pay to issue securities of this kind, and the inclusion in the price to public of the underwriting discount, and our estimated profit and the costs relating to our hedging of the Notes. These factors, together with various credit, market and economic factors over the term of the Notes, are expected to reduce the price at which you may be able to sell the Notes in any secondary market and will affect the value of the Notes in complex and unpredictable ways. Assuming no change in market conditions or any other relevant factors, the price, if any, at which you may be able to sell your Notes prior to maturity may be less than 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 Notes. In addition, any price at which you may sell the Notes is likely to reflect customary bid-ask spreads for similar trades. In addition to bid-ask spreads, the value of the Notes determined for any secondary market price is expected to be based on a secondary market rate rather than the internal borrowing rate used to price the Notes 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 Notes are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your Notes to maturity.

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

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

- Owning the Notes Is Not the Same as Owning the Underlying or the Stocks Comprising the Underlying or the Underlying's Underlying Index — The return on your Notes may not reflect the return you would realize if you actually owned the Underlying or stocks included in the Underlying or the Underlying's underlying index. As a holder of the Notes, you will not have voting rights or rights to receive dividends or other distributions or other rights that holders of the Underlying or these stocks would have, and any such dividends will not be incorporated in the determination of the underlying return.

- The Policies of the Underlying's Investment Adviser Could Affect the Amount Payable on the Notes and Their Market Value — The policies of the Underlying's investment adviser concerning the management of the Underlying, additions, deletions or substitutions of the securities held by the Underlying could affect the market price of shares of the Underlying and, therefore, the amounts payable on the Notes and the market value of the Notes prior to maturity. The amount payable on the Notes and their market value could also be affected if the Underlying investment adviser changes these policies, for example, by changing the manner in which it manages the Underlying, or if the Underlying investment adviser discontinues or suspends maintenance of the Underlying, in which case it may become difficult to determine the market value of the Notes. The Underlying's investment adviser has no connection to the offering of the Notes and has no obligations to you as an investor in the Notes in making its decisions regarding the Underlying.

- The Correlation Between the Performance of the Underlying and the Performance of the Underlying Index May Be Imperfect — The performance of the Underlying is linked principally to the performance of the Underlying Index. However, because of the potential discrepancies identified in more detail in the product prospectus supplement, the return on the Underlying may correlate imperfectly with the return on the Underlying Index. Further, the performance of the Underlying may not exactly replicate the performance of the Underlying Index, because the Underlying will reflect transaction costs and fees that are not included in the calculation of the Underlying Index.

During periods of market volatility, securities included in the Underlying Index may be unavailable in the secondary market, market participants may be unable to calculate accurately the net asset value per share of the Underlying and the liquidity of the Underlying may be adversely affected. This kind of market volatility may also disrupt the ability of market participants to create and redeem shares of the Underlying. Further, market volatility may adversely affect, sometimes materially, the prices at which market participants are willing to buy and sell shares of the Underlying. As a result, under these circumstances, the market value of shares of the Underlying may vary substantially from the net asset value per share of the Underlying. For all of the foregoing reasons, the performance of the Underlying may not correlate with the performance of its Underlying Index as well as the net asset value per share of the Underlying, which could materially and adversely affect the value of the Notes in the secondary market and/or reduce your payment at maturity.

- Historical Prices of the Underlying Should Not Be Taken as an Indication of its Future Prices During the Term of the Notes — The trading prices of the Underlying will determine the value of the Notes at any given time. However, it is impossible to predict whether the price of the Underlying will rise or fall, trading prices of the common stocks held by the Underlying will be influenced by complex and interrelated political, economic, financial and other factors that can affect the issuers of those stocks, and therefore, the price of the Underlying.

- There Can Be No Assurance that the Investment View Implicit in the Notes Will Be Successful — It is impossible to predict whether and the extent to which the price of the Underlying will rise or fall. The closing price of the Underlying will be influenced by complex and interrelated political, economic, financial and other factors that affect the Underlying. You should be willing to accept the downside risks of owning equities in general and the Underlying in particular, and the risk of losing some or all of your initial investment.
- The Underlying and its Underlying Index Are Different — The performance of the Underlying may not exactly replicate the performance of the underlying index, because the Underlying will reflect transaction costs and fees that are not included in the calculation of the underlying index. It is also possible that the performance of the Underlying may not fully replicate or may in certain circumstances diverge significantly from the performance of the underlying index due to the temporary unavailability of certain securities in the secondary market, the performance of any derivative instruments contained in the Underlying or due to other circumstances. The Underlying may use futures contracts, options, swap agreements, currency forwards and repurchase agreements in seeking performance that corresponds to the underlying index and in managing cash flows.

During periods of market volatility, securities underlying the Underlying may be unavailable in the secondary market, market participants may be unable to calculate accurately the net asset value per share of the Underlying and the liquidity of the Underlying may be adversely affected. This kind of market volatility may also disrupt the ability of market participants to create and redeem shares of the Underlying. Further, market volatility may adversely affect, sometimes materially, the prices at which market participants are willing to buy and sell shares of the Underlying. As a result, under these circumstances, the market value of shares of the Underlying may vary substantially from the net asset value per share of the Underlying. For all of the foregoing reasons, the performance of the Underlying may not correlate with the performance of its underlying index as well as the net asset value per share of the Underlying, which could materially and adversely affect the value of the Notes in the secondary market and/or reduce your payment at maturity.

- Management Risk — The Underlying is not managed according to traditional methods of “active” investment management, which involve the buying and selling of securities based on economic, financial and market analysis and investment judgment. Instead, the Underlying, utilizing a “passive” or indexing investment approach, attempts to approximate the investment performance of its underlying index by investing in a portfolio of securities that generally replicate the underlying index. Therefore, unless a specific security is removed from the underlying index, the Underlying generally would not sell a security because the security’s issuer was in financial trouble. In addition, the Underlying is subject to the risk that the investment strategy of the Underlying’s investment advisor may not produce the intended results.
- The Stocks Included in the Underlying Index Are Concentrated in One Sector — All of the stocks included in the KBE’s underlying index are issued by companies in the banking sector. As a result, the stocks that will determine the performance of the underlying index, which the Underlying seeks to replicate, are concentrated in one sector. Although an investment in the Notes will not give holders any ownership or other direct interests in the stocks comprising the underlying index, the return on an investment in the Notes will be subject to certain risks associated with a direct equity investment in companies in the banking sector. Accordingly, by investing in the Notes, you will not benefit from the diversification which could result from an investment linked to companies that operate in multiple sectors.
- Risks Associated with the Banking Sector — Stock prices for banking companies are affected by extensive governmental regulation which may limit both the amounts and types of loans and other financial commitments those companies can make, the interest rates and fees they can charge and the amount of capital they must maintain. Profitability for banking companies is largely dependent on the availability and cost of capital funds and can fluctuate significantly when interest rates change. Credit losses resulting from financial difficulties of borrowers can negatively impact banking companies. Banks may also be subject to severe price competition, as competition is high among banking companies and failure to maintain or increase market share may result in lost market value. In addition, changes in governmental regulation and oversight of financial institutions such as banks and broker-dealers may have an adverse effect on the financial condition of a financial institution and changes in the creditworthiness of financial institutions may adversely affect the values of instruments of issuers in financial industries.
- Lack of Liquidity — The Notes will not be listed on any securities exchange. RBCCM intends to offer to purchase the Notes 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 Notes easily. Because other dealers are not likely to make a secondary market for the Notes, the price at which you may be able to trade your Notes is likely to depend on the price, if any, at which RBCCM is willing to buy the Notes.
- Potential Conflicts — We and our affiliates play a variety of roles in connection with the issuance of the Notes, including hedging our obligations under the Notes. In performing these duties, the economic interests of the calculation agent and other affiliates of ours are potentially adverse to your interests as an investor in the Notes.
- Potentially Inconsistent Research, Opinions or Recommendations by RBCCM, UBS or Their Affiliates — RBCCM, UBS or their affiliates may publish research, express opinions or provide recommendations as to the Underlying that are inconsistent with investing in or holding the Notes, and which may be revised at any time. Any such research, opinions or recommendations could affect the value of the Underlying, and therefore the market value of the Notes.
- Uncertain Tax Treatment — Significant aspects of the tax treatment of an investment in the Notes are uncertain. You should consult your tax adviser about your tax situation.
- Potential Royal Bank of Canada and UBS Impact on Price — Trading or transactions by Royal Bank of Canada, UBS or our respective affiliates in the Underlying of the Underlying Index, or in futures, options, exchange-traded funds or other derivative products on the Underlying or the Underlying Index may adversely affect the market value of the Underlying, the closing price of the Underlying, and, therefore, the market value of the Notes.
- The Terms of the Notes 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 Notes 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 Notes, including a combination of a bond with one or more options or other derivative instruments. For the market value of the Notes, we expect that, generally, the price of the Underlying on any day will affect the value of the Notes more than any other single factor. However, you should not expect the value of the Notes in the secondary market to vary in

proportion to changes in the price of the Underlying. The value of the Notes will be affected by a number of other factors that may either offset or magnify each other, including:

- the price of the Underlying;
- the actual and expected volatility of the price of the Underlying;
- the time remaining to maturity of the Notes;
- the dividend rates on the securities held by the Underlying;
- interest and yield rates in the market generally, as well as in each of the markets of the securities held by the Underlying;
- a variety of economic, financial, political, regulatory or judicial events;
- the occurrence of certain events with respect to the Underlying that may or may not require an adjustment to the terms of the Notes; and
- our creditworthiness, including actual or anticipated downgrades in our credit ratings.

Some or all of these factors influenced the terms of the Notes at issuance, and will influence the price you will receive if you choose to sell the Notes 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 Notes at a substantial discount from the principal amount if, for example, the price of the Underlying is at, below or not sufficiently above, its Downside Threshold.

- The Anti-Dilution Protection for the Underlying Is Limited — The calculation agent will make adjustments to the Initial Price, Downside Threshold and Coupon Barrier for certain events affecting the shares of the Underlying. However, the calculation agent will not be required to make an adjustment in response to all events that could affect the Underlying. If an event occurs that does not require the calculation agent to make an adjustment, the value of the Notes and the payments on the Notes may be materially and adversely affected.

Hypothetical Examples

Hypothetical terms only. Actual terms may vary. See the cover page for actual offering terms.
The following examples are hypothetical and provided for illustrative purposes only. They do not purport to be representative of every possible scenario concerning increases or decreases in the price of the Underlying relative to its Initial Price. Royal Bank of Canada cannot predict the Final Price of the Underlying. You should not take these examples as an indication or assurance of the expected performance of the Underlying. The numbers appearing in the examples and tables below have been rounded for ease of analysis. The following examples and tables illustrate the Payment at Maturity or upon an automatic call per Note on a hypothetical offering of the Notes, based on the following hypothetical assumptions (actual terms for the Notes are specified on the cover page of this pricing supplement):

Principal Amount:	$10.00
Term:	Approximately two years
Hypothetical Initial Price*:	$100.00
Contingent Coupon Rate:	7.70% per annum (or 1.925% per quarter)
Contingent Coupon**:	$0.1925 per quarter
Coupon Observation Dates:	Quarterly
Call Observation Dates:	Quarterly (callable after 6 months)
Hypothetical Downside Threshold*:	$80.00 (80% of the hypothetical Initial Price).
Hypothetical Coupon Barrier*:	$80.00 (80% of the hypothetical Initial Price).

* Not the actual Initial Price, Coupon Barrier or Downside Threshold applicable to the Notes. The actual Initial Price, Coupon Barrier and Downside Threshold are set forth on the cover page of this document.
** Contingent Coupon payments, if payable, will be paid in arrears in equal quarterly installments during the term of the Notes unless earlier called.

Scenario #1: Notes Are Called on the Second Coupon Observation Date.

Date	Closing Price	Payment (per Note)
First Coupon Observation Date	$105.00 (at or above Coupon Barrier and Initial Price)	$0.1925 (Contingent Coupon – not callable)
Second Coupon Observation Date	$110.00 (at or above Coupon Barrier and Initial Price)	$10.1925 (Call Settlement Amount)
	Total Payment:	$10.385 (3.85% return)

Since the Notes are called on the second Coupon Observation Date, we will pay you on the Call Settlement Date a total of $10.385 per Note, reflecting your principal amount plus the applicable Contingent Coupon. When added to the Contingent Coupon payment of $0.1925 received in respect of the prior Coupon Observation Date, we will have paid you a total of $10.385 per Note, for a 3.85% total return on the Notes. No further amount will be owed to you under the Notes.

Scenario #2: Notes Are Called on the Third Coupon Observation Date.

Date	Closing Price	Payment (per Note)
First Coupon Observation Date	$95.00 (at or above Coupon Barrier; below Initial Price)	$0.1925 (Contingent Coupon – not callable)
Second Coupon Observation Date	$85.50 (at or above Coupon Barrier; below Initial Price)	$0.1925 (Contingent Coupon – not called)
Third Coupon Observation Date	$105.00 (at or above Initial Price)	$10.1925 (Call Settlement Amount)
	Total Payment:	$10.5775 (5.775% return)

Since the Notes are called on the third Coupon Observation Date, we will pay you on the Call Settlement Date a total of $10.1925 per Note, reflecting your principal amount plus the applicable Contingent Coupon. When added to the

Contingent Coupon payments of $0.385 received in respect of prior Coupon Observation Dates, we will have paid you a total of $10.5775 per Note, for a 5.775% total return on the Notes. No further amount will be owed to you under the Notes.

Scenario #3: Notes Are NOT Called and the Final Price of the Underlying Is at or Above the Downside Threshold.

Date	Closing Price	Payment (per Note)
First Coupon Observation Date	$95.00 (at or above Coupon Barrier; below Initial Price)	$0.1925 (Contingent Coupon – not callable)
Second Coupon Observation Date	$59.50 (below Coupon Barrier)	$0.00 (not called)
Third Coupon Observation Date	$81.00 (at or above Coupon Barrier; below Initial Price)	$0.1925 (Contingent Coupon – not called)
Fourth Coupon Observation Date	$83.00 (at or above Coupon Barrier; below Initial Price)	$0.1925 (Contingent Coupon – not called)
Fifth through Seventh Coupon Observation Dates	Various (each below Coupon Barrier)	$0.00 (not called)
Final Valuation Date	$80.00 (at or above Downside Threshold and Coupon Barrier; below Initial Price)	$10.1925 (Payment at Maturity)
	Total Payment:	$10.77 (7.70% return)

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At maturity, we will pay you a total of $10.1925 per Note, reflecting your principal amount plus the applicable Contingent Coupon. When added to the Contingent Coupon payments of $0.5775 received in respect of prior Coupon Observation Dates, we will have paid you a total of $10.77 per Note, for a 7.70% total return on the Notes.

Scenario #4: Notes Are NOT Called and the Final Price of the Underlying Is Below the Downside Threshold

Date	Closing Price	Payment (per Note)
First Coupon Observation Date	$95.00 (at or above Coupon Barrier; below Initial Price)	$0.1925 (Contingent Coupon– not callable)
Second Coupon Observation Date	$85.50 (at or above Coupon Barrier; below Initial Price)	$0.1925 (Contingent Coupon – not called)
Third Coupon Observation Date	$81.50 (at or above Coupon Barrier; below Initial Price)	$0.1925 (Contingent Coupon – not called)
Fourth through Seventh Coupon Observation Dates	Various (each below Coupon Barrier)	$0.00 (not called)
Final Valuation Date	$40.00 (below Downside Threshold and Coupon Barrier)	$10.00 + [$10.00 × underlying return] = $10.00 + [$10.00 × -60%] = $10.00 - $6.00 = $4.00 (Payment at Maturity)
	Total Payment:	$4.5775 (-54.225% return)

Since the Notes are not called and the Final Price of the Underlying is below the Downside Threshold, we will pay you at maturity $4.00 per Note. When added to the Contingent Coupon payments of $0.5775 received in respect of prior Coupon Observation Dates, we will have paid you $4.5775 per Note, for a loss on the Notes of 54.225%.

The Notes differ from ordinary debt securities in that, among other features, we are not necessarily obligated to repay the full amount of your initial investment. If the Notes are not called on any Call Observation Date, you may lose some or all of your initial investment. Specifically, if the Notes are not called and the Final Price is less than the Downside Threshold, you will lose 1% (or a fraction thereof) of your principal amount for each 1% (or a fraction thereof) that the underlying return is less than zero.

Any payment on the Notes, including payments in respect of an automatic call, Contingent Coupon or any repayment of principal provided at maturity, is dependent on our ability to satisfy our obligations when they come due. If we are unable to meet our obligations, you may not receive any amounts due to you under the Notes.

What Are the Tax Consequences of the Notes?

U.S. Federal Income Tax Consequences

The following, together with the discussion of U.S. federal income tax in the accompanying product prospectus supplement, prospectus supplement, and prospectus, is a general description of the material U.S. federal income tax consequences relating to an investment in the Notes. The following summary is not complete and is qualified in its entirety by the discussion under the section entitled "Supplemental Discussion of U.S. Federal Income Tax Consequences" in the accompanying product prospectus supplement no. UBS-TPAOS-2, 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 Notes. The discussions below and in the accompanying product prospectus supplement, prospectus supplement, and prospectus, do not address the tax consequences applicable to holders subject to Section 451(b) of the Internal Revenue Code.

In the opinion of our counsel, Morrison & Foerster LLP, it would generally be reasonable to treat the Notes as a callable pre-paid cash-settled contingent income-bearing derivative contract linked to the Underlying for U.S. federal income tax purposes, and the terms of the Notes require a holder and us (in the absence of a change in law or an administrative or judicial ruling to the contrary) to treat the Notes for all tax purposes in accordance with such characterization. Although the U.S. federal income tax treatment of the Contingent Coupons is uncertain, we intend to take the position, and the following discussion assumes, that such Contingent Coupons (including any coupon paid on or with respect to the call or maturity date) constitute taxable ordinary income to a U.S. holder at the time received or accrued in accordance with the holder's regular method of accounting. If the Notes are treated as described above, subject to the potential application of the "constructive ownership" rules under Section 1260 of the Internal Revenue Code, a U.S. holder should generally recognize capital gain or loss upon the call, sale or maturity of the Notes in an amount equal to the difference between the amount a holder receives at such time (other than amounts properly attributable to any Contingent Coupon, which would be taxed, as described above, as ordinary income) and the holder's tax basis in the Notes. 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 might assert that a treatment other than that described above is more appropriate. In addition, the Internal Revenue Service has released a notice that may affect the taxation of holders of the Notes. According to the notice, the Internal Revenue Service and the Treasury Department are actively considering whether the holder of an instrument such as the Notes 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 Notes will ultimately be required to accrue income currently and this could be applied on a retroactive basis. The Internal Revenue Service and the 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 Internal Revenue 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.

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 Notes.

Under Section 871(m) of the Internal Revenue 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, 2019. Based on our determination that the Notes are not delta-one instruments, non-U.S. holders should not be subject to withholding on dividend equivalent payments, if any, under the Notes. However, it is possible that the Notes could be treated as deemed reissued for U.S. federal income tax purposes upon the occurrence of certain events affecting the Underlying or the Notes, and following such occurrence the Notes could be treated as subject to withholding on dividend equivalent payments. Non-U.S. holders that enter, or have entered, into other transactions in respect of the Underlying or the Notes should consult their tax advisors as to the application of the dividend equivalent withholding tax in the context of the Notes and their other transactions. If any payments are treated as dividend equivalents subject to withholding, we (or the applicable withholding agent) would be entitled to withhold taxes without being required to pay any additional amounts with respect to amounts so withheld.

The Notes are not intended for purchase by any investor that is not a United States person, as that term is defined for U.S. federal income tax purposes, and the underwriters will not make offers of the Notes to any such investor.

Canadian Federal Income Tax Consequences

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

Information About the Underlying

Included on the following pages is a brief description of the Underlying. This information has been obtained from publicly available sources. Set forth below is a table that provides the quarterly high and low and period-end closing prices for the Underlying. We obtained the closing price information set forth below from the Bloomberg Professional® service ("Bloomberg") without independent verification. You should not take the historical prices of the Underlying as an indication of future performance.

The SPDR® S&P® Bank ETF

The shares of the SPDR® S&P® Bank ETF (the "ETF") are issued by the SPDR® Series Trust (the "trust"), a registered investment company. The Underlying seeks investment results that, before fees and expenses, correspond generally to the total return performance of the S&P Banks Select Industry Index (the "index"). The Underlying trades on the NYSE Arca under the ticker symbol "KBE". SSGA Funds Management, Inc. ("SSGA") currently serves as the investment advisor to the Underlying. We obtained the following information in this section from the SPDR® website and the reports referenced below, in each case, without independent verification.

For additional information regarding the trust or SSGA, please consult the reports and other information the trust files with the SEC. Information provided to or filed with the SEC can be inspected and copied at the public reference facilities maintained by the SEC or through the SEC's website at sec.gov. In addition, information regarding the Underlying, including its top portfolio holdings and the performance of the Underlying and the underlying index, may be obtained from other sources including, but not limited to, press releases, newspaper articles, other publicly available documents, and the SPDR® website at spdrs.com/product/fund.seam?ticker=KBE. We are not incorporating by reference the website, the sources listed above or any material they include in this document.

Investment Objective and Strategy

The Underlying seeks to provide investment results that correspond generally to the total return performance, before fees and expenses, of the S&P Banks Select Industry Index (the "index").

The Underlying uses a representative sampling strategy to try to achieve its investment objective, which means that the Underlying is not required to purchase all of the securities represented in the underlying index. Instead, the Underlying may purchase a subset of the securities in the underlying index in an effort to hold a portfolio of securities with generally the same risk and return characteristics of the underlying index. Under normal market conditions, the Underlying generally invests substantially all, but at least 80%, of its total assets in the securities comprising the underlying index. The Underlying will provide shareholders with at least 60 days' notice prior to any change in this 80% investment policy. In addition, the Underlying may invest in equity securities not included in the underlying index, cash and cash equivalents or money market instruments, such as repurchase agreements and money market funds (including money market funds advised by SSGA).

In certain situations or market conditions, the Underlying may temporarily depart from its normal investment policies and strategies provided that the alternative is consistent with the Underlying's investment objective and is in the best interest of the Underlying. For example, the Underlying may make larger than normal investments in derivatives to maintain exposure to the underlying index if it is unable to invest directly in a component security.

The board may change the Underlying's investment strategy, index and other policies without shareholder approval. The board may also change the Underlying's investment objective without shareholder approval.

Notwithstanding the Underlying's investment objective, the return on your notes will not reflect any dividends paid on the Underlying shares, on the securities purchased by the Underlying or on the securities that comprise the underlying index.

The S&P® Banks Select Industry™ Index

The S&P Banks Select Industry Index (Bloomberg symbol, "SPSIBK Index") is managed by S&P Dow Jones Indices LLC ("S&P") and is an equal-weighted index that is designed to measure the performance of stocks in the S&P Total Market Index that both (i) are classified under the Global Industry Classification Standard ("GICS®") in the asset management & custody banks, diversified banks, regional banks, other diversified financial services and thrifts & mortgage finance sub-industries and (ii) satisfy certain liquidity and market capitalization requirements. The S&P Total Market Index tracks all U.S. common stocks with a primary listing on the NYSE, NYSE Arca, NYSE American, Nasdaq Global Select Market, Nasdaq Select Market, Nasdaq Capital Market, Bats BZX, Bats BYX, Bats EDGA, Bats EDGX and IEX exchanges. The index is one of the 21 sub-industry sector indices S&P maintains that are derived from a portion of the stocks comprising the S&P Total Market Index. An equal-weighted index is one where every stock has the same weight in the underlying index. As such, the underlying index must be rebalanced from time to time to re-establish the proper weighting.

Eligibility for Inclusion in the Index

Selection for the underlying index is based on a company's GICS® classification, as well as liquidity and market capitalization requirements. In addition, only U.S. companies are eligible for inclusion in the underlying index. GICS® classifications are determined by S&P using criteria it has selected or developed. Index and classification system sponsors may use very different standards for determining sector designations. In addition, many companies operate in a number of sectors, but are listed only in one sector. As a result, sector comparisons between indices with different sponsors may reflect differences in methodology as well as actual differences in the sector composition of the indices.

To be eligible for inclusion in the underlying index, stocks must be in the S&P Total Market Index and have a float-adjusted market capitalization above $2 billion with a float-adjusted liquidity ratio above 100%. The float-adjusted liquidity ratio is defined as the dollar value traded over the previous 12 months divided by the float-adjusted market capitalization as of the underlying index's rebalancing reference date. All stocks in the related GICS® sub-industries satisfying the above requirements are included in the underlying index and the total number of stocks in the underlying index should be at least 35. If there are fewer than 35 stocks in the underlying index, the market capitalization requirements may be relaxed to reach at least 22 stocks. With respect to liquidity, the length of time to evaluate liquidity is reduced to the available trading period for companies that recently became public or companies that were spun-off from other companies, the stocks of which therefore do not have 12 months of trading history.

Calculation of the Total Return of the Index

The price return index is calculated as the underlying index market value divided by the divisor. The total return calculation begins with the price return of the underlying index. Given the underlying index is an equal-weighted index, the market capitalization of each stock used in the calculation of the underlying index market value is redefined so that each stock has an equal weight in the underlying index on each rebalancing date. The adjusted market capitalization for each stock in the underlying index is calculated as the product of the stock price, the number of shares outstanding, the stock's float factor and the adjustment factor.

A stock's float factor refers to the number of shares outstanding that are available to investors. S&P indices exclude shares closely held by control groups from the underlying index calculation because such shares are not available to investors. For each stock, S&P calculates an Investable Weight Factor (IWF) which is the percentage of total shares outstanding that are included in the underlying index calculation.

The adjustment factor for each stock is assigned at each rebalancing date and is calculated by dividing a specific constant set for the purpose of deriving the adjustment factor (often referred to as modified index shares) by the number of stocks in the underlying index multiplied by the float adjusted market value of such stock on such rebalancing date.

Adjustments are also made to ensure that no stock in the underlying index will have a weight that exceeds the value that can be traded in a single day for a theoretical portfolio of $2 billion. Theoretical portfolio values are reviewed annually and any updates are made at the discretion of the underlying index committee, as defined below.

The maximum basket liquidity weight for each stock in the underlying index will be calculated using the ratio of its three-month median daily value traded to the theoretical portfolio value of $2 billion. Each stock's weight in the index is then compared to its maximum basket liquidity weight and is set to the lesser of (1) its maximum basket liquidity weight or (2) its initial equal weight. All excess weight is redistributed across the underlying index to the uncapped stocks. If necessary, a final adjustment is made to ensure that no stock in the underlying index has a weight greater than 4.5%. No further adjustments are made if the latter step would force the weight of those stocks limited to their maximum basket liquidity weight to exceed that weight. If the underlying index contains exactly 22 stocks as of the rebalancing effective date, the underlying index will be equally weighted without basket liquidity constraints.

If a company has more than one share class line in the S&P Total Market Index, such company will be represented once by the primary listing (generally the most liquid share line). In the event that a company issues a secondary share class to the index share class holders by means of a mandatory distribution, the newly issued share class line will be added to the underlying index on the distribution ex-date, provided that the distributed class is not considered to be de minimis. Both share class lines will then remain in the underlying index until the next rebalancing, at which time only the primary share class line will be considered for continued inclusion.

The index is calculated by using the divisor methodology used in all S&P equity indices. The initial divisor was set to have a base value of 1,000 on June 20, 2003. The index level is the index market value divided by the index divisor. In order to maintain index series continuity, it is also necessary to adjust the divisor at each rebalancing. Therefore, the divisor (after rebalancing) equals the index market value (after rebalancing) divided by the index value before rebalancing. The divisor keeps the underlying index comparable over time and is one manipulation point for adjustments to the index, which we refer to as maintenance of the index.

Once the price return index has been calculated, the total return index is calculated. First, the total daily dividend for each stock in the underlying index is calculated by multiplying the per share dividend by the number of shares included in the index. Then the index dividend is calculated by aggregating the total daily dividends for each of the index stocks (which may be zero for some stocks) and dividing by the divisor for that day. Next the daily total return of the index is calculated as a fraction minus 1, the numerator of which is the sum of the index level plus the index dividend and the denominator of which is the index level on the previous day. Finally, the total return index for that day is calculated as the product of the value of the total return index on the previous day times the sum of 1 plus the index daily total return for that day.

Maintenance of the Index

The composition of the underlying index is reviewed quarterly. Rebalancing occurs after the closing of the relevant U.S. trading markets on the third Friday of the month ending that quarter. The reference date for float-adjusted market capitalization and the float-adjusted liquidity ratio is after the closing of the last trading day of the previous month. The reference date for GICS® classification is as of the rebalancing effective date. Existing stocks in the index are removed at the quarterly rebalancing if either their float-adjusted capitalization falls below $1 billion or their float-adjusted liquidity ratio falls below 50%. A company will also be deleted from the index if the S&P Total Market Index deletes that company. Companies are added between rebalancings only if a company deletion causes the number of companies in the index to fall below 22. The newly added company will be added to the index at the weight of the deleted company. If the stock was deleted at $0.00, the newly added stock will be added at the deleted stock's previous day's closing value (or the most immediate prior business day that the deleted stock was not valued at $0.00) and an adjustment to the divisor will be made (only in the case of stocks removed at $0.00). At the next rebalancing, the index will be rebalanced based on the eligibility requirements and equal-weight methodology discussed above. In the case of GICS® changes, where a stock no longer qualifies to belong to the index after the classification change, it is removed from the index on the next rebalancing date. In the case of a spin-off, the spin-off company will be added to the index at a zero price after the close of the trading on the day before the ex-date. In general and subject to certain exceptions, both the parent company and spin-off companies will remain in the index until the next index rebalancing. In the case of mergers involving two index constituents, the merged entity will remain in the index provided that it meets all general eligibility requirements. The merged entity will be added to the index at the weight of the stock deemed to be the surviving stock in the transaction. The surviving stock will not experience a weight change and its subsequent weight will not be equal to that of the pre-merger weight of the merged entities.

Adjustments are made to the index in the event of certain corporate actions relating to the stocks included in the index, such as spin off, rights offerings, stock splits and special dividends.

Index Committee

The Americas Thematic and Strategy Index Committee (the "index committee") maintains the index and consists of full-time professional members of S&P staff. At monthly meetings, the index committee reviews pending corporate actions that may affect index constituents, statistics comparing the composition of the indices to the market, companies that are being considered as candidates for additions to the index and any significant market events. The index committee may also revise index policy, such as the rules for selecting constituents, the treatment of dividends, share counts or other matters.

Unscheduled Market Closures

In situations where an exchange is forced to close early due to unforeseen events, such as computer or electric power failures, weather conditions or other events, S&P will calculate the closing price of the stocks in the index based on (1) the closing prices published by the exchange, or (2) if no closing price is available, the last regular trade reported before the exchange closed. In all cases, the prices will be from the primary exchange for each stock in the index. If an exchange for a stock fails to open due to unforeseen circumstances, S&P will use the prior day's closing prices for such stock. If all exchanges fail to open, S&P may determine not to publish the index for that day.

Historical Information

The following table sets forth the quarterly high, low and period-end closing prices for the Underlying, based on daily closing prices, as reported by Bloomberg L.P. The historical performance of the Underlying should not be taken as an indication of its future performance during the term of the Notes.

Quarter Begin	Quarter End	Quarterly Closing High	Quarterly Closing Low	Quarterly Period-End Close
1/1/2008	3/31/2008	$47.34	$37.42	$38.85
4/1/2008	6/30/2008	$42.66	$28.59	$28.59
7/1/2008	9/30/2008	$39.75	$23.92	$33.49
10/1/2008	12/31/2008	$35.86	$18.30	$21.89
1/1/2009	3/31/2009	$22.34	$9.31	$13.86
4/1/2009	6/30/2009	$21.56	$14.00	$18.05
7/1/2009	9/30/2009	$24.08	$16.91	$23.33
10/1/2009	12/31/2009	$24.44	$20.68	$21.17
1/1/2010	3/31/2010	$26.07	$21.71	$25.81
4/1/2010	6/30/2010	$28.72	$22.89	$22.89
7/1/2010	9/30/2010	$25.29	$21.39	$22.95
10/1/2010	12/31/2010	$26.10	$22.10	$25.91
1/1/2011	3/31/2011	$27.64	$25.30	$25.82
4/1/2011	6/30/2011	$26.43	$22.99	$23.99
7/1/2011	9/30/2011	$24.44	$17.09	$17.54
10/1/2011	12/31/2011	$20.49	$16.73	$19.83
1/1/2012	3/31/2012	$24.44	$20.29	$23.85
4/1/2012	6/30/2012	$24.10	$20.25	$22.04
7/1/2012	9/30/2012	$24.63	$21.12	$23.48
10/1/2012	12/31/2012	$24.40	$22.29	$23.83
1/1/2013	3/31/2013	$27.23	$24.57	$26.92
4/1/2013	6/30/2013	$28.84	$25.47	$28.72
7/1/2013	9/30/2013	$31.98	$29.09	$30.03
10/1/2013	12/31/2013	$33.18	$29.54	$33.17
1/1/2014	3/31/2014	$34.67	$30.78	$34.04
4/1/2014	6/30/2014	$34.50	$31.03	$33.42
7/1/2014	9/30/2014	$33.87	$31.24	$31.91
10/1/2014	12/31/2014	$33.92	$30.05	$33.55
1/1/2015	3/31/2015	$34.15	$29.99	$33.51
4/1/2015	6/30/2015	$37.20	$33.44	$36.26
7/1/2015	9/30/2015	$37.06	$31.61	$33.24
10/1/2015	12/31/2015	$36.59	$32.93	$33.82
1/1/2016	3/31/2016	$33.05	$26.52	$30.37
4/1/2016	6/30/2016	$33.64	$28.19	$30.48
7/1/2016	9/30/2016	$34.23	$29.27	$33.38
10/1/2016	12/31/2016	$44.16	$33.21	$43.47
1/1/2017	3/31/2017	$46.56	$41.67	$42.98
4/1/2017	6/30/2017	$44.10	$41.01	$43.52
7/1/2017	9/30/2017	$45.09	$39.81	$45.09
10/1/2017	12/31/2017	$48.37	$43.68	$47.34
1/1/2018	3/31/2018	$51.86	$46.75	$47.89
4/1/2018	5/4/2018*	$48.73	$46.82	$48.38

* This document includes information for the second calendar quarter of 2018 for the period from April 1, 2018 through May 4, 2018. Accordingly, the “Quarterly Closing High,” “Quarterly Closing Low” and “Quarterly Period-End Close” data indicated are for this shortened period only and do not reflect complete data for the second calendar quarter

of 2018.

The graph below illustrates the performance of the Underlying from January 1, 2008 to May 4, 2018, based on the Initial Price of $48.38, which was its closing price on the Trade Date. The solid line represents the Coupon Barrier and Downside Threshold of $38.70, which is equal to 80.00% of the Initial Price (rounded to two decimal places).

n Coupon Barrier / Downside Threshold = 80.00%

HISTORIC PERFORMANCE IS NOT AN INDICATION OF FUTURE PERFORMANCE.

Source: Bloomberg L.P. We have not independently verified the accuracy or completeness of the information obtained from Bloomberg Financial Markets.

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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 Financial Services Inc. may sell all or a part of the Notes that it will purchase from us to investors at the price to public or to its affiliates at the price indicated on the cover of this pricing supplement.

Subject to regulatory constraints and market conditions, RBCCM intends to offer to purchase the Notes 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 Notes 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" in the accompanying product prospectus supplement no. UBS-TPAOS-2.

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

The value of the Notes shown on your account statement may be based on RBCCM's estimate of the value of the Notes if RBCCM or another of our affiliates were to make a market in the Notes (which it is not obligated to do). That estimate will be based upon the price that RBCCM may pay for the Notes in light of then prevailing market conditions, our creditworthiness and transaction costs. For a period of approximately 6 months after the issue date of the Notes, the value of the Notes that may be shown on your account statement may be higher than RBCCM's estimated value of the Notes at that time. This is because the estimated value of the Notes will not include the underwriting discount and our hedging costs and profits; however, the value of the Notes shown on your account statement during that period may be a higher amount, reflecting the addition of the underwriting discount and our estimated costs and profits from hedging the Notes. Any such excess is expected to decrease over time until the end of this period. After this period, if RBCCM repurchases your Notes, it expects to do so at prices that reflect their estimated value. This period may be reduced at RBCCM's discretion based on a variety of factors, including but not limited to, the amount of the Notes 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 January 8, 2016.

No Prospectus (as defined in Directive 2003/71/EC (as amended, the "Prospectus Directive")) will be prepared in connection with the Notes. Accordingly, the Notes may not be offered to the public in any member state of the European Economic Area (the "EEA"), and any purchaser of these Notes who subsequently sells any of these Notes in any EEA member state must do so only in accordance with the requirements of the Prospectus Directive, as implemented in that member state.

The Notes are not intended to be offered, sold or otherwise made available to, and should not be offered, sold or otherwise made available to, any retail investor in the EEA. For these purposes, the expression "offer" includes the communication in any form and by any means of sufficient information on the terms of the offer and the Notes to be offered so as to enable an investor to decide to purchase or subscribe the Notes, and a "retail investor" means a person who is one (or more) of: (a) a retail client, as defined in point (11) of Article 4(1) of Directive 2014/65/EU (as amended, "MiFID II"); or (b) a customer, within the meaning of Insurance Distribution Directive 2016/97/EU, as amended, where that customer would not qualify as a professional client as defined in point (10) of Article 4(1) of MiFID II; or (c) not a qualified investor as defined in the Prospectus Directive. Consequently, no key information document required by Regulation (EU) No 1286/2014 (as amended, the "PRIIPs Regulation") for offering or selling the Notes or otherwise making them available to retail investors in the EEA has been prepared, and therefore, offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

Structuring the Notes

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

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

The lower implied borrowing rate is a factor that reduced the economic terms of the Notes to you. The initial offering price of the Notes also reflects the underwriting commission and our estimated hedging costs. These factors resulted in the initial estimated value for the Notes on the Trade Date being less than their public offering price. See “Key Risks—The Initial Estimated Value of the Notes 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 Notes” and the provisions in the accompanying product prospectus supplement no. UBS-TPAOS-2 dated January 20, 2016 under the caption “General Terms of the Securities” are incorporated into the master note issued to DTC, the registered holder of the Notes. In addition to those terms, the following two sentences are also incorporated into the master note: RBC confirms that it fully understands and is able to calculate the effective annual rate of interest applicable to the Notes based on the methodology for calculating per annum rates provided for in the Notes. RBC irrevocably agrees not to plead or assert Section 4 of the Interest Act (Canada), whether by way of defense or otherwise, in any proceeding relating to the Notes.

Validity of the Notes

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

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