ROYAL BANK OF CANADA
Form FWP
December 06, 2017

ISSUER FREE WRITING PROSPECTUS
Filed Pursuant to Rule 433
Registration Statement No. 333-208507
Dated December 5, 2017
Royal Bank of Canada Trigger Autocallable Contingent Yield Notes
$ Notes Linked to the Least Performing Underlying Between the iShares® Russell 2000 ETF and the SPDR® EURO STOXX 50® ETF due on or about December 18, 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 least performing of the iShares® Russell 2000 ETF and the SPDR® EURO STOXX 50® ETF (each, an "Underlying," and, together, the "Underlyings"). We will pay a quarterly Contingent Coupon payment if the closing prices of both Underlyings on the applicable Coupon Observation Date are equal to or greater than their respective Coupon Barriers. Otherwise, no coupon will be paid for that quarter. We will automatically call the Notes early if the closing prices of both Underlyings on any quarterly Call Observation Date (beginning after six months) are equal to or greater than their respective Initial Prices. If the Notes are called, we will pay you the principal amount of your Notes plus the Contingent Coupon for the applicable 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 Prices of both Underlyings are equal to or greater than their respective Downside Thresholds (which are the same prices as their respective Coupon Barriers), 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. However, if the Final Price of the Underlying with the lowest percentage change from its Initial Price (the "Least Performing Underlying") is less than its 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 Least Performing 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 will not receive a coupon for any Coupon Observation Date on which either Underlying closes below its Coupon Barrier. The Notes will not be automatically called if either Underlying closes below its Initial Price on a quarterly Call Observation Date. You may lose some or all of your principal amount if the Least Performing Underlying closes below its Downside Threshold, regardless of the performance of the other Underlying. The contingent repayment of principal only applies if you hold the Notes until maturity. Generally, the higher the Contingent Coupon Rate on a security, the greater the risk of loss. 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[1]

Contingent Coupon — We will pay a quarterly Contingent Coupon payment if the closing prices of both Underlyings on the applicable Coupon Observation Date are equal to or greater than their respective Coupon Barriers. Otherwise, no coupon will be paid for the quarter.
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 prices of both Underlyings on any quarterly Call Observation Date (beginning after six months) are greater than or equal to their respective Initial Prices. If the Notes are not called, investors will have the potential for downside equity market risk at maturity.
Contingent Repayment of Principal at Maturity — If by maturity the Notes have not been called and the price of each Underlying does not close below its Downside Threshold on the Final Valuation Date, we will repay your principal amount per Note at maturity. However, if the price of the Least Performing Underlying is less than its 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 Least Performing 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[1]	December 15, 2017
Settlement Date[1]	December 20, 2017
Coupon Observation Dates[2]	Quarterly (see page 6)
Call Observation Dates[2]	Quarterly (callable after six months) (see page 6)
Final Valuation Date[2]	December 15, 2020
Maturity Date[2]	December 18, 2020

1 Expected. In the event that we make any change to the expected trade date and settlement date, the Coupon Observation Dates, the Call Observation Dates, the Final Valuation Date and/or the maturity date will be changed so that the stated term of the Notes remains approximately the same.

2 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

NOTICE TO INVESTORS: THE NOTES ARE SIGNIFICANTLY RISKIER THAN CONVENTIONAL DEBT INSTRUMENTS. THE ISSUER IS 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 LEAST PERFORMING UNDERLYING. THIS MARKET RISK IS IN ADDITION TO THE CREDIT RISK INHERENT IN PURCHASING A DEBT OBLIGATION OF ROYAL BANK OF CANADA. 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, THE RISKS DESCRIBED 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

This free writing prospectus relates to Trigger Autocallable Contingent Yield Notes we are offering linked to the least performing Underlying between the iShares® Russell 2000 ETF and the SPDR® EURO STOXX 50® ETF. The Contingent Coupon Rate, Initial Prices, the Downside Thresholds and the Coupon Barriers for the Notes will be determined on the trade date. 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.

Underlyings (Least Performing of)	Tickers	Contingent Coupon Rate	Initial Prices	Downside Thresholds	Coupon Barriers	CUSIP	ISIN
iShares® Russell 2000 ETF (IWM)	IWM	6.50% to 7.50% per annum	•	70% of its Initial Price	70% of its Initial Price	78013F826	US78013F8260
SPDR® EURO STOXX 50® ETF (FEZ)	FEZ		•	70% of its Initial Price	70% of its Initial Price		

See "Additional Information About Royal Bank of Canada and the Notes" in this free writing prospectus. 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 free writing prospectus.

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 free writing prospectus 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 Security
Notes linked to the Least Performing Underlying Between the iShares® Russell 2000 ETF and the SPDR® EURO STOXX 50® ETF	•	$10.00	•	$0.20	•	$9.80

[1] UBS Financial Services Inc., which we refer to as UBS, will receive a commission that will depend on market conditions on the trade date. In no event will the commission received by UBS exceed $0.20 per $10 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 $9.6637 per $10 in principal amount, which is less than the price to public. The pricing supplement relating to the Notes will set forth our estimate of the initial value of the Notes as of the trade date, which will not be more than $0.20 less than this amount. The actual value of the Notes at any time will reflect many factors, cannot be predicted with accuracy, and may be less than this amount. We describe our determination of the initial estimated value under "Key Risks" beginning on page 7, "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

Royal Bank of Canada has filed a registration statement (including a prospectus) with the Securities and Exchange Commission, or SEC, for the offering to which this free writing prospectus relates. Before you invest, you should read the prospectus in that registration statement and the other documents relating to this offering that Royal Bank of Canada has filed with the SEC for more complete information about Royal Bank of Canada and this offering. You may obtain these documents without cost by visiting EDGAR on the SEC website at www.sec.gov. Alternatively, Royal Bank of Canada, any agent or any dealer participating in this offering will arrange to send you the prospectus, the prospectus supplement, product prospectus supplement no. UBS-TPAOS-2 and this free writing prospectus if you so request by calling toll-free 866-609-6009.

You may revoke your offer to purchase the Notes at any time prior to the time at which we accept such offer by notifying the applicable agent. We reserve the right to change the terms of, or reject any offer to purchase, the Notes prior to their issuance. In the event of any changes to the terms of the Notes, we will notify you and you will be asked to accept such changes in connection with your purchase. You may also choose to reject such changes, in which case we may reject your offer to purchase.

You should read this free writing prospectus together with the prospectus dated January 8, 2016, as supplemented by the prospectus supplement dated January 8, 2016, relating to our Series G medium-term notes 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 free writing prospectus, 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 free writing prospectus 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 terms "Underlying" and "Underlyings" are 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 free writing prospectus, "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 securities composing the Least Performing Underlying.
- You believe the closing prices of both Underlyings will be equal to or greater than their respective Coupon Barriers on most or all of the Coupon Observation Dates (including the Final Valuation Date).
- You are willing to make an investment whose return is limited to the applicable Contingent Coupon payments, regardless of any potential appreciation of the Underlyings, which could be significant.
- 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 Underlyings.
- 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 Underlyings.
- 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 would be willing to invest in the Notes if the Contingent Coupon Rate were set to the low end of the range indicated on the cover page of this free writing prospectus. The actual Contingent Coupon Rate will be set on the trade date.
- You are willing to accept individual exposure to each Underlying and that the performance of the Least Performing Underlying will not be offset or mitigated by the performance of the other Underlying.
- You understand and accept the risks associated with the Underlyings.
- 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 Least Performing Underlying.
- You believe that the price of either Underlying will decline during the term of the Notes and is likely to close below its Coupon Barrier on most or all of the Coupon Observation Dates and below its Downside Threshold on the Final Valuation Date.
- You seek an investment that participates in the full appreciation in the prices of the Underlyings 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 Least Performing Underlying.
- You would be unwilling to invest in the Notes if the Contingent Coupon Rate were set to the low end of the range indicated on the cover page of this free writing prospectus. The actual Contingent Coupon Rate will be set on the trade date.
- You do not understand or accept the risks associated with the Underlyings.
- You are unwilling to accept individual exposure to each Underlying and that the performance of the Least Performing Underlying will not be offset or mitigated by the performance of the other Underlying.
- You seek guaranteed current income from this investment or prefer to receive the dividends paid on the Underlyings.
- 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 “Information About the Underlyings” below for more information about the Underlyings.

Indicative Terms of the Notes[1]

Issuer:	Royal Bank of Canada
Principal Amount per Note:	$10 per Note
Term:[2]	Approximately three years, if not previously called
Underlying:	The iShares® Russell 2000 ETF (“IWM”) and the SPDR® EURO STOXX 50® ETF (“FEZ”) (each, an “Underlying”)
Closing Price:	With respect to each Underlying, on any trading day, the last reported sale price 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:	With respect to each Underlying, its closing price on the trade date.
Final Price:	With respect to each Underlying, its closing price on the Final Valuation Date.
Contingent Coupon:	If the closing prices of both Underlyings are equal to or greater than their respective Coupon Barriers on any Coupon Observation Date, we will pay you the Contingent Coupon applicable to that Coupon Observation Date. If the closing price of either Underlying is less than its 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 will be 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 either Underlying is less than its Coupon Barrier.

Contingent Coupon Rate:	6.50% to 7.50% per annum (1.625% to 1.875% per quarter), to be determined on the trade date.
Coupon Barrier:	With respect to each Underlying, 70% of its 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:	With respect to each Underlying, 70% of its 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 prices of both Underlyings on any Call Observation Date (beginning after six months and set forth on page 6) are greater than or equal to their respective Initial Prices.

[1] Terms used in this free writing prospectus, but not defined herein, shall have the meanings ascribed to them in the product prospectus supplement.
[2] In the event we make any change to the expected trade date and settlement date, the Final Valuation Date and maturity date will be changed to ensure that the stated term of the Notes remains approximately the same.

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 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 Prices of both Underlyings are equal to or greater than their respective Downside Thresholds and the Coupon Barriers, we will pay you a cash payment per Note on the maturity date equal to \$10 plus the Contingent Coupon otherwise due on the maturity date. If the Notes are not called and the Final Price of the Least Performing Underlying is less than its 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 of the Least Performing Underlying, equal to: \$10.00 + (\$10.00 × Underlying Return of the Least Performing Underlying)
Least Performing Underlying:	The Underlying with the lowest Underlying Return.
Underlying Return:	With respect to each Underlying, $\frac{\text{Final Price} - \text{Initial Price}}{\text{Initial Price}}$

Investment Timeline

Trade Date	The Initial Price, Downside Threshold and Coupon Barrier of each Underlying are determined. The Contingent Coupon Rate is set.
Quarterly (beginning after six months):	If the closing prices of both Underlyings are equal to or greater than their respective Coupon Barriers 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 prices of both Underlyings on any Call Observation Date (beginning after six months) is equal to or greater than their respective Initial Prices. 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 each Underlying is observed on the Final Valuation Date. If the Notes have not been called and the Final Prices of both Underlyings are equal to or greater than their respective Downside Thresholds (and their respective Coupon Barriers), 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 of the Least Performing Underlying is less than its 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 Least Performing Underlying, for an amount equal to: $10 + ($10 × Underlying Return of the Least Performing Underlying) per Note

INVESTING IN THE NOTES INVOLVES SIGNIFICANT RISKS. YOU MAY LOSE SOME OR ALL OF YOUR PRINCIPAL AMOUNT. YOU WILL BE EXPOSED TO THE MARKET RISK OF EACH UNDERLYING ON EACH COUPON OBSERVATION DATE AND ON THE FINAL VALUATION DATE, AND ANY DECLINE IN THE PRICE OF ONE UNDERLYING MAY NEGATIVELY AFFECT YOUR RETURN AND WILL NOT BE OFFSET OR MITIGATED BY A LESSER DECLINE OR ANY POTENTIAL INCREASE IN THE PRICE OF THE OTHER UNDERLYING. 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
March 15, 2018	March 19, 2018
June 15, 2018[(1)]	June 19, 2018[(2)]
September 17, 2018[(1)]	September 19, 2018[(2)]
December 17, 2018[(1)]	December 19, 2018[(2)]
March 15, 2019[(1)]	March 19, 2019[(2)]
June 17, 2019[(1)]	June 19, 2019[(2)]
September 16, 2019[(1)]	September 18, 2019[(2)]
December 16, 2019[(1)]	December 18, 2019[(2)]
March 16, 2020[(1)]	March 18, 2020[(2)]
June 15, 2020[(1)]	June 17, 2020[(2)]
September 15, 2020[(1)]	September 17, 2020[(2)]
December 15, 2020[(3)]	December 18, 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 Underlyings or the securities held by the Underlyings. 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 each Underlying is greater than or equal to its Downside Threshold, and we will only make that payment at maturity. If the Notes are not called and the Final Price of the Least Performing Underlying is less than its Downside Threshold, you will lose some or all of your initial investment in an amount proportionate to the decline in the price of the Least Performing 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 prices of both Underlyings are above their respective Downside Thresholds.
- 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 prices of both Underlyings on a Coupon Observation Date are less than their respective Coupon Barriers, we will not pay you the Contingent Coupon applicable to that Coupon Observation Date. If the closing prices of both Underlyings are less than their respective Coupon Barriers 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 of the Least Performing Underlying will be less than its 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 Underlyings. In addition, the total return on the Notes will vary based on the number of Coupon 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 Coupon 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 limited to six months. If the Notes are not called, you may be subject to the full downside performance of the Least Performing 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 prices of the Underlyings and the shorter time remaining for the prices of the Underlyings 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 Underlyings or on a similar security that allows you to participate in the appreciation of the prices of the Underlyings.
- The Contingent Coupon Rate Per Annum Payable on the Notes Will Reflect in Part the Volatility of the Underlyings, 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 prices of the Underlyings. The greater the volatility of the Underlyings, the more likely it is that the price of either Underlying could close below its 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 will be set on the trade date, the Underlyings' volatility can change significantly over the term of the Notes, and may increase. The prices of one or both of the Underlyings could fall sharply as of the Final Valuation Date, which could result in a significant loss of your principal.
- Reinvestment Risk — The Notes will be called automatically if the closing prices of both Underlyings are equal to or greater than their respective Initial Prices 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 Will Be 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, and that will be set forth in the final pricing supplement for the Notes, will be less than the public offering price you pay for the Notes and 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 prices of the Underlyings, 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 Are 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 an Underlying or the Stocks Comprising an Underlying's Underlying Index — The return on your Notes may not reflect the return you would realize if you actually owned an Underlying or stocks included in an 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 an Underlying or these stocks would have, and any such dividends will not be incorporated in the determination of the Underlying Return for either Underlying.
- You Will Not Have Any Shareholder Rights and Will Have No Right to Receive Any Shares of the Underlyings at Maturity — Investing in the Notes will not make you a holder of any shares of the Underlyings or any securities held by the Underlyings. Neither you nor any other holder or owner of the Notes will have any voting rights, any right to receive dividends or other distributions, or any other rights with respect to the Underlyings or such other securities.
- Changes That Affect the Underlying Indices Will Affect the Market Value of the Notes and the Amount You Will Receive at Maturity — The policies of the index sponsors concerning the calculation of the underlying indices, additions, deletions or substitutions of the components of the underlying indices and the manner in which changes affecting those components, such as stock dividends, reorganizations or mergers, may be reflected in the underlying indices and, therefore, could affect the share prices of the Underlyings, the amount 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 an index sponsor changes these policies, for example, by changing the manner in which it calculates the applicable underlying index, or if an index sponsor discontinues or suspends the calculation or publication of the applicable underlying index.
- We Have No Affiliation with Any Index Sponsor and Will Not Be Responsible for Its Actions — The index sponsors are not affiliates of ours and will not be involved in the offering of the Notes in any way. Consequently, we have no control over the actions of the index sponsors, including any actions of the type that would require the calculation agent to adjust the payment to you at maturity. The index sponsors have no obligation of any sort with respect to the Notes. Thus, the index sponsors have no obligation to take your interests into consideration for any reason, including in taking any actions that might affect the value of the Notes. None of our proceeds from the issuance of the Notes will be delivered to the index sponsors.
- Adjustments to an Underlying Could Adversely Affect the Notes — Blackrock, Inc. ("Blackrock"), in its role as the sponsor of the Underlyings, is responsible for calculating and maintaining the Underlyings. Blackrock can add, delete or substitute the stocks comprising the Underlyings or make other methodological changes that could change the share prices of the Underlyings at any time. If one or more of these events occurs, the calculation of the amount payable at maturity may be adjusted to reflect such event or events. Consequently, any of these actions could adversely affect the amounts payable on the Notes and/or the market value of the Notes.
- We and Our Affiliates Do Not Have Any Affiliation With the Investment Advisor of the Underlyings and Are Not Responsible for Its Public Disclosure of Information — We and our affiliates are not affiliated with Blackrock in any way and have no ability to control or predict its actions, including any errors in or discontinuance of disclosure regarding its methods or policies relating to the Underlyings. Blackrock is not involved in the offering of the Notes in any way and has no obligation to consider your interests as an owner of the Notes in taking any actions relating to the Underlyings that might affect the value of the Notes. Neither we nor any of our affiliates has independently verified the adequacy or accuracy of the information about Blackrock or the Underlyings contained in any public disclosure of information. You, as an investor in the Notes, should make your own investigation into the Underlyings.
- The Correlation Between the Performance of Each Underlying and the Performance of its Respective Underlying Index May Be Imperfect — The performance of an Underlying is linked principally to the performance of its underlying index. However, because of the potential discrepancies identified in more detail in the product prospectus supplement, the return on each Underlying may correlate imperfectly with the return on its underlying index. Further,

the performance of an Underlying may not exactly replicate the performance of its underlying index, because an Underlying will reflect transaction costs and fees that are not included in the calculation of its underlying index. During periods of market volatility, securities underlying an Underlying may be unavailable in the secondary market, market participants may be unable to calculate accurately the net asset value per share of an Underlying and the liquidity of an Underlying may be adversely affected. This kind of market volatility may also disrupt the ability of market participants to create and redeem shares of an Underlying. Further, market volatility may adversely affect, sometimes materially, the prices at which market participants are willing to buy and sell shares of an Underlying. As a result, under these circumstances, the market value of shares of an Underlying may vary substantially from the net asset value per share of that Underlying. For all of the foregoing reasons, the performance of an Underlying may not correlate with the performance of its underlying index as well as its net asset value per share, 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 any Underlying Should Not Be Taken as an Indication of its Future Price During the Term of the Notes — The trading prices of the Underlyings will determine the value of the Notes at any given time. As it is impossible to predict whether the price of any Underlying will rise or fall, and trading prices of the common stocks held by the Underlyings will be influenced by complex and interrelated political, economic, financial and other factors that can affect the issuers of those stocks, and therefore, the value of the Underlyings.

¨ Management Risk — The Underlyings are 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, these Underlyings, utilizing a ‘‘passive’’ or indexing investment approach, attempt to approximate the investment performance of its respective underlying index by investing in a portfolio of securities that generally replicate its underlying index. Therefore, unless a specific security is removed from its underlying index, these Underlyings generally would not sell a security because the security’s issuer was in financial trouble. In addition, the Underlyings are subject to the risk that the investment strategy of their respective investment advisors may not produce the intended results.

¨ Your Return on the Notes Is Not Linked to a Basket Consisting of the Underlyings. Rather, It Will Be Contingent Upon the Performance of Each Individual Underlying. Unlike an instrument with a return linked to a basket of Underlyings or other underlying assets, in which risk is mitigated and diversified among all of the components of the basket, you will be exposed equally to the risks related to both of the Underlyings. Poor performance by either one of the Underlyings over the term of the Notes may negatively affect your return and will not

8

be offset or mitigated by a positive performance by the other Underlying. For the Notes to be automatically called or to receive any Contingent Coupon payment or contingent repayment of principal at maturity from us, both Underlyings must close above their Initial Prices, Coupon Barriers and Downside Thresholds, respectively, on the applicable Coupon Observation Date. In addition, if not called prior to maturity, you may incur a loss proportionate to the negative return of the Least Performing Underlying. Accordingly, your investment is subject to the market risk of each Underlying, which results in a higher risk of your not receiving Contingent Coupon payments and incurring a loss at maturity.

¨ Because the Notes Are Linked to the Individual Performance of More than One Underlying, It Is More Likely that One of the Underlyings Will Decrease in Value Below its Coupon Barrier and its Downside Threshold, Increasing the Probability That You Will Not Receive the Contingent Coupons and that You Will Lose Some or All of Your Initial Investment. The risk that you will not receive the Contingent Coupons and that you will lose some or all of your initial investment in the Notes is greater if you invest in the Notes as opposed to securities that are linked to the performance of a single Underlying if their terms are otherwise substantially similar. With a greater total number of Underlyings, it is more likely that an Underlying will be below its Coupon Barrier or Downside Threshold on a Coupon Observation Date or the Final Valuation Date, and therefore it is more likely that you will not receive the Contingent Coup