

ROYAL BANK OF CANADA  
Form FWP  
February 13, 2017

---

RBC Capital Markets® Filed Pursuant to Rule 433  
Registration Statement No. 333-208507

The information in this preliminary terms supplement is not complete and may be changed.

Preliminary Terms

Supplement

Subject to Completion:

Dated February 10, 2017

Pricing Supplement

Dated March \_\_, 2017 to \$\_\_\_\_\_

the Product Geared Buffered Fixed Coupon Notes with

Prospectus Supplement Averaging Linked to the S&P 500® Index,

ERN-EI-1 Dated January Due March 8, 2021

12, 2016, Royal Bank of Canada

Prospectus Supplement

Dated January 8, 2016,

and Prospectus

Dated January 8, 2016

Royal Bank of Canada is offering the Geared Buffered Fixed Coupon Notes with Averaging (the “Notes”) linked to the performance of the S&P 500® Index (the “Reference Asset”). The Notes are senior unsecured obligations of Royal Bank of Canada, will pay a semi-annual coupon (each a “Coupon Payment”) at the coupon rate specified below, and will have the terms described in the documents described above, as supplemented or modified by this terms supplement, as set forth below.

The CUSIP number for the Notes is 78012KA49. You could lose up to 100% of the principal amount of the Notes at maturity. All payments on the Notes are subject to our credit risk.

Issue Date: March 8, 2017

Maturity Date: March 8, 2021

The Notes will not be listed on any securities exchange.

Coupon Rate: 1.25% to 1.55% per annum, to be determined on the pricing date. The Coupon Payments on the Notes will not be impacted by the level of the Reference Asset.

Coupon Payment Dates: Semi-annually, on March 8 and September 8 of each year, beginning on September 8, 2017 and ending on the Maturity Date.

Payment at Maturity (if held to maturity): For each \$1,000 principal amount, in addition to the final Coupon Payment, the investor will receive at maturity an amount in cash equal to:

· if the Final Percentage Change is greater than or equal to -20%, \$1,000 + (\$1,000 x Average Percentage Change); or

· if the Final Percentage Change is less than -20%,  
\$1,000 + {\$1,000 x [(Final Percentage Change + 20%) x 1.25] + Average Percentage Change}.

The Average Percentage Change (as defined below) has a minimum value of zero. As a result, if the level of the Reference Asset does not decrease from the Initial Level to the Final Level by more than 20%, investors will receive at least the principal amount. If the level of the Reference Asset decreases by more than 20%, investors will lose up to 100% of the principal amount if the Average Percentage Change does not offset the leveraged difference between the Final Percentage Change and the Buffer

Percentage of 20%.

Investing in the Notes involves a number of risks. See “Risk Factors” beginning on page S-1 of the prospectus supplement dated January 8, 2016, “Additional Risk Factors Specific to the Notes” beginning on page PS-4 of the product prospectus supplement dated January 12, 2016, and “Selected Risk Considerations” beginning on page P-7 of this terms supplement.

The Notes will not constitute deposits insured by the Canada Deposit Insurance Corporation, the U.S. Federal Deposit Insurance Corporation or any other Canadian or U.S. government agency or instrumentality.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined that this terms supplement is truthful or complete. Any representation to the contrary is a criminal offense.

	Per Note	Total
Price to public	100.00%	\$
Underwriting discounts and commissions	%	\$
Proceeds to Royal Bank of Canada	%	\$

The initial estimated value of the Notes as of the date of this terms supplement is \$986.91 per \$1,000 in principal amount, which is less than the price to public. The final pricing supplement relating to the Notes will set forth our estimate of the initial value of the Notes as of the Pricing Date, which will not be less than \$966.91 per \$1,000 in principal 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 in more detail below.

If the Notes priced on the date of this terms supplement, RBC Capital Markets, LLC, which we refer to as RBCCM, acting as agent for Royal Bank of Canada, would not be expected to receive a commission in connection with the sale of the Notes. See “Supplemental Plan of Distribution (Conflicts of Interest)” on page P-21 below.

Non-U.S. holders will not be subject to withholding on dividend equivalent payments under Section 871(m) of the U.S. Internal Revenue Code. Please see the section below, “Supplemental Discussion of U.S. Federal Income Tax Consequences,” which applies to the Notes.

RBC Capital Markets, LLC

Geared Buffered Fixed Coupon Notes with  
Averaging Linked to the S&P 500® Index,  
Due March 8, 2021

SUMMARY

The information in this “Summary” section is qualified by the more detailed information set forth in this terms supplement, the product prospectus supplement, the prospectus supplement, and the prospectus.

General: This terms supplement relates to an offering of Geared Buffered Fixed Coupon Notes with Averaging (the “Notes”) linked to the S&P 500 Index (the “Reference Asset”).

Issuer: Royal Bank of Canada (“Royal Bank”)

Issue: Senior Global Medium-Term Notes, Series G

Denominations: Minimum denomination of \$1,000, and integral multiples of \$1,000 thereafter.

Designated Currency: U.S. Dollars

Reference Asset: S&P 500® Index

Pricing Date: March 3, 2017

Issue Date: March 8, 2017

Valuation Date: March 3, 2021

Averaging Dates: June 3, 2020, September 3, 2020, December 3, 2020 and March 3, 2021 (the Valuation Date).

Maturity Date: March 8, 2021

Term: Four years

Coupon Rate: 1.25% to 1.55% per annum, to be determined on the pricing date. The Coupon Payments will not be impacted by the level of the Reference Asset.

Coupon Payment Dates: Semi-annually, on March 8 and September 8 of each year, beginning on September 8, 2017 and ending on the Maturity Date.

Day Count Fraction: 30/360, following unadjusted.

Record Dates: The record date for each Coupon Payment Date will be the date one business day prior to that scheduled Coupon Payment Date; provided, however, that any Coupon Payment payable at maturity will be payable to the person to whom the Payment at Maturity will be payable.

Final Percentage Change: Expressed as a percentage, an amount equal to:

Average Percentage Change: Expressed as a percentage, an amount equal to: , subject to a minimum value of zero.

Buffer Percentage: 20%

Buffer Level: 80% of the Initial Level

Downside Leverage Factor: 1.25

P-2 RBC Capital Markets, LLC

---

Geared Buffered Fixed Coupon Notes with  
Averaging Linked to the S&P 500® Index,  
Due March 8, 2021

Initial Level:	The closing level of the Reference Asset on the pricing date.
Final Level:	The closing level of the Reference Asset on the Valuation Date.
Average Level:	The arithmetic average of the closing level of the Reference Asset on each of the four quarterly Averaging Dates.
Payment at Maturity:	<p>For each \$1,000 in principal amount of the Notes, in addition to the final Coupon Payment at maturity, the investor will receive at maturity an amount in cash equal to:</p> <ul style="list-style-type: none"> <li>• if the Final Percentage Change is greater than or equal to -20%, \$1,000 + (\$1,000 x Average Percentage Change);</li> </ul> <p>In such a case, because the minimum Average Percentage Change is zero, the Payment at Maturity will not be less than \$1,000 per \$1,000 in principal amount.</p> <ul style="list-style-type: none"> <li>• if the Final Percentage Change is less than -20%, \$1,000 + {\$1,000 x [(Final Percentage Change + Buffer Percentage) x Downside Leverage Factor] + Average Percentage Change}</li> </ul> <p>In such a case, the return on the Notes could be negative, and you will lose up to 100% of the principal amount if the Average Percentage Change does not offset the leveraged difference between the Final Percentage Change and the Buffer Percentage.</p>
Calculation Agent:	<p>RBCCM</p> <p>By purchasing a Note, each holder agrees (in the absence of a change in law, an administrative determination or a judicial ruling to the contrary) to treat the Note as an investment unit consisting of (i) a non-contingent debt instrument issued by us to you (the “Debt Portion”) and (ii) a put option with respect to the Reference Asset written by you and purchased by us (the “Put Option”) for U.S. federal income tax purposes. However, the U.S. federal income tax consequences of your investment in the Notes are uncertain and the Internal Revenue Service (the “IRS”) could assert that the Notes should be taxed in a manner that is different from that described in the preceding sentence. Please see the section below, “Supplemental Discussion of U.S. Federal Income Tax Consequences,” which applies to the Notes.</p>
U.S. Tax Treatment:	
Secondary Market:	<p>RBCCM (or one of its affiliates), though not obligated to do so, plans to maintain a secondary market in the Notes after the Issue Date. The amount that you may receive upon sale of your Notes prior to maturity may be less than the principal amount of your Notes.</p>
Listing:	The Notes will not be listed on any securities exchange.
Clearance and Settlement:	DTC global (including through its indirect participants Euroclear and Clearstream, Luxembourg as described under “Description of Debt Securities—Ownership and Book-Entry Issuance” in the prospectus dated January 8, 2016).
Terms Incorporated in the Master Note:	All of the terms appearing above the item captioned “Secondary Market” on pages P-2 and P-3 of this terms supplement and the terms appearing under the caption “General Terms of the Notes” in the product prospectus supplement dated January 12, 2016, as modified by this terms supplement.

Geared Buffered Fixed Coupon Notes with  
Averaging Linked to the S&P 500® Index,  
Due March 8, 2021

#### ADDITIONAL TERMS OF YOUR NOTES

You should read this terms supplement together with the prospectus dated January 8, 2016, as supplemented by the prospectus supplement dated January 8, 2016 and the product prospectus supplement dated January 12, 2016, relating to our Senior Global Medium-Term Notes, Series G, of which these Notes are a part. Capitalized terms used but not defined in this terms supplement will have the meanings given to them in the product prospectus supplement. In the event of any conflict, this terms supplement will control. The Notes vary from the terms described in the product prospectus supplement in several important ways. In particular, the Notes will pay coupons, but the payments on the Notes will not exceed the sum of the principal amount and the Coupon Payments. You should read this terms supplement carefully.

This terms supplement, together with the documents listed below, contains the terms of the Notes and supersedes all prior or contemporaneous oral statements as well as any other written materials including preliminary or indicative pricing terms, correspondence, trade ideas, structures for implementation, sample structures, brochures or other educational materials of ours. You should carefully consider, among other things, the matters set forth in “Risk Factors” in the prospectus supplement dated January 8, 2016 and “Additional Risk Factors Specific to the Notes” in the product prospectus supplement dated January 12, 2016, as the Notes involve risks not associated with conventional debt securities. We urge you to consult your investment, legal, tax, accounting and other advisors before you invest in the Notes. You may access these documents on the Securities and Exchange Commission (the “SEC”) website at [www.sec.gov](http://www.sec.gov) as follows (or if that address has changed, by reviewing our filings for the relevant date on the SEC website):

Prospectus dated January 8, 2016:

<http://www.sec.gov/Archives/edgar/data/1000275/000121465916008810/j18160424b3.htm>

Prospectus Supplement dated January 8, 2016:

<http://www.sec.gov/Archives/edgar/data/1000275/000121465916008811/p14150424b3.htm>

Product Prospectus Supplement ERN-EI-1 dated January 12, 2016:

<https://www.sec.gov/Archives/edgar/data/1000275/000114036116047560/form424b5.htm>

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

Royal Bank of Canada has filed a registration statement (including a product prospectus supplement, a prospectus supplement, and a prospectus) with the SEC for the offering to which this terms supplement relates. Before you invest, you should read those documents and the other documents relating to this offering that we have filed with the SEC for more complete information about us and this offering. You may obtain these documents without cost by visiting EDGAR on the SEC Website at [www.sec.gov](http://www.sec.gov). Alternatively, Royal Bank of Canada, any agent or any dealer participating in this offering will arrange to send you the product prospectus supplement, the prospectus supplement and the prospectus if you so request by calling toll-free at 1-866-609-6009.

P-4 RBC Capital Markets, LLC

---

Geared Buffered Fixed Coupon Notes with  
Averaging Linked to the S&P 500® Index,  
Due March 8, 2021

#### HYPOTHETICAL RETURNS

The examples set out below are included for illustration purposes only. The hypothetical Percentage Changes of the Reference Asset used to illustrate the calculation of the Payment at Maturity (excluding the final Coupon Payment and rounded to two decimal places) are not estimates or forecasts of the Initial Level, the Average Level, the Final Level or the level of the Reference Asset on any Averaging Date, the Valuation Date, or on any trading day prior to the Maturity Date. All examples assume that a holder purchased Notes with an aggregate principal amount of \$1,000, the Buffer Percentage of 20% (the Buffer Level is 80% of the Initial Level), the Downside Leverage Factor of 1.25, and that no market disruption event occurs on any Averaging Date, including the Valuation Date.

Example 1 Calculation of the Payment at Maturity where the Final Percentage Change is greater than or equal to -20% (and the Average Percentage Change is positive).  
Average Percentage Change: 10%  
Final Percentage Change: -10%  
Payment at Maturity:  $\$1,000 + (\$1,000 \times 10\%) = \$1,000 + \$100 = \$1,100$   
On a \$1,000 investment, when the Final Percentage Change is greater than or equal to -20%, a 10% Average Percentage Change results in a Payment at Maturity of \$1,100, a return on the Notes equal to the Average Percentage Change of 10%.

Example 2 Calculation of the Payment at Maturity where the Final Percentage Change is greater than or equal to -20% (and the Average Percentage Change is negative).  
Average Percentage Change: -10%, however, the minimum Average Percentage Change is zero  
Final Percentage Change: 30%  
Payment at Maturity:  $\$1,000 + (\$1,000 \times 0\%) = \$1,000 + \$0 = \$1,000$   
On a \$1,000 investment, when the Final Percentage Change is greater than or equal to -20%, although the Final Percentage Change is 30%, a -10% Average Percentage Change results in a Payment at Maturity of \$1,000, a 0% return on the Notes.

Example 3 Calculation of the Payment at Maturity where the Final Percentage Change is less than -20% (and the Average Percentage Change is positive).  
Average Percentage Change: 14%  
Final Percentage Change: -30%

Geared Buffered Fixed Coupon Notes with  
Averaging Linked to the S&P 500® Index,  
Due March 8, 2021

Payment at Maturity:  $\$1,000 + \{ \$1,000 \times [((-30\% + 20\%) \times 1.25) + 14\%] \} = \$1,000 + \$15 = \$1,015$

On a \$1,000 investment, when the Final Percentage Change is less than -20%, a 14% Average Percentage Change results in a Payment at Maturity of \$1,015, a 1.50% return on the Notes. In this case, the positive Average Percentage Change offsets the leveraged difference between the Final Percentage Change and the Buffer Percentage, resulting in a positive return on the Notes.

Example 4 Calculation of the Payment at Maturity where the Final Percentage Change is less than -20% (and the Average Percentage Change is positive).

Average Percentage Change: 10%

Final Percentage Change: -50%

Payment at Maturity:  $\$1,000 + \{ \$1,000 \times [((-50\% + 20\%) \times 1.25) + 10\%] \} = \$1,000 - \$275 = \$725$

On a \$1,000 investment, when the Final Percentage Change is less than -20%, a 10% Average Percentage Change results in a Payment at Maturity of \$725, a -27.50% return on the Notes. In this case, the positive Average Percentage Change does not offset the leveraged difference between the Final Percentage Change and the Buffer Percentage, resulting in a negative return on the Notes.

Example 5 Calculation of the Payment at Maturity where the Final Percentage Change is less than -20% (and the Average Percentage Change is negative).

Average Percentage Change: -5%, however, the minimum Average Percentage Change is zero

Final Percentage Change: -30%

Payment at Maturity:  $\$1,000 + \{ \$1,000 \times [((-30\% + 20\%) \times 1.25) + 0\%] \} = \$1,000 - \$125 = \$875$

On a \$1,000 investment, when the Final Percentage Change is less than -20%, a -5% Average Percentage Change results in a Payment at Maturity of \$875, a -12.50% return on the Notes. In this case, since the Average Percentage Change is negative, you will be subject to a loss equal to the leveraged difference between the Final Percentage Change and the Buffer Percentage, resulting in a negative return on the Notes.

P-6 RBC Capital Markets, LLC

---

Geared Buffered Fixed Coupon Notes with  
Averaging Linked to the S&P 500® Index,  
Due March 8, 2021

#### SELECTED RISK CONSIDERATIONS

An investment in the Notes involves significant risks. Investing in the Notes is not equivalent to investing directly in the Reference Asset. These risks are explained in more detail in the section “Additional Risk Factors Specific to the Notes,” beginning on page PS-4 of the product prospectus supplement. In addition to the risks described in the prospectus supplement and the product prospectus supplement, you should consider the following:

**Principal at Risk** – Investors in the Notes could lose up to 100% of their principal amount if the Final Percentage Change is less than -20% and the Average Percentage Change, which has a minimum value of 0%, does not offset the leveraged difference between the Final Percentage Change and the Buffer Percentage. Unless the Average Percentage Change is positive, investors will lose 1.25% of the principal amount for each 1% that the Final Level is less than the Buffer Level. Even if the Average Percentage Change is positive, if the Final Level is less than the Buffer Level, you may lose a significant portion of your principal amount at maturity. There can be no assurances that the Average Percentage Change will be positive, and the more the Final Level is less than the Initial Level, the less likely it will be that the Average Percentage Change will be positive.

**The Return on the Notes Will Be Affected by the Average Percentage Change** — If the Final Percentage Change is greater than or equal to -20%, the return on the Notes will equal the Average Percentage Change. Because the Average Percentage Change will be calculated based on the Average Level, which is based on the arithmetic average of the closing level of the Reference Asset on each of the four quarterly Averaging Dates, and the Average Level may be less than the Final Level on the Valuation Date, your return on the Notes may be less than what it would be if the payment on the Notes were based solely on the performance of the Reference Asset from the Initial Level to the Final Level. This difference could be particularly large if there is a significant increase in the closing level of the Reference Asset during the latter portion of the term of the Notes. Similarly, if the Final Percentage Change is less than -20%, the Average Percentage Change may be zero, or may not be sufficiently greater than zero to offset the Final Percentage Change. Additionally, the secondary market value of the Notes, if such a market exists, will be impacted by the closing level of the Reference Asset on any previous Averaging Dates, in that those levels will impact the amount payable at maturity.

**Your Return on the Notes May Be Lower than the Return on a Conventional Debt Security of Comparable Maturity** – The return that you will receive on the Notes, which could be negative, may be less than the return you could earn on other investments. Even if your return is positive, your return may be less than the return you would earn if you bought a conventional senior interest bearing debt security of Royal Bank.

**Payments on the Notes Are Subject to Our Credit Risk, and Changes in Our Credit Ratings Are Expected to Affect the Market Value of the Notes** – The Notes are Royal Bank’s senior unsecured debt securities. As a result, your receipt of the Coupon Payments and the amount due on the Maturity Date are dependent upon Royal Bank’s ability to repay its obligations as of the applicable payment date. This will be the case even if the level of the Reference Asset increases after the Pricing Date. No assurance can be given as to what our financial condition will be at any time during the term of the Notes.

**There May Not Be an Active Trading Market for the Notes—Sales in the Secondary Market May Result in Significant Losses** – There may be little or no secondary market for the Notes. The Notes will not be listed on any securities exchange. RBCCM and other affiliates of Royal Bank may make a market for the Notes; however, they are not required to do so. RBCCM or any other affiliate of Royal Bank may stop any market-making activities at any time. Even if a secondary market for the Notes develops, it may not provide significant liquidity or trade at



Geared Buffered Fixed Coupon Notes with  
Averaging Linked to the S&P 500® Index,  
Due March 8, 2021

prices advantageous to you. We expect that transaction costs in any secondary market would be high. As a result, the difference between bid and asked prices for your Notes in any secondary market could be substantial.

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

**The Initial Estimated Value of the Notes Will Be Less than the Price to the Public –** The initial estimated value set forth on the cover page and that will be set forth in the final pricing supplement for the Notes does not represent a minimum price at which we, RBCCM or any of our affiliates would be willing to purchase the Notes in any secondary market (if any exists) at any time. If you attempt to sell the Notes prior to maturity, their market value may be lower than the price you paid for them and the initial estimated value. This is due to, among other things, changes in the level of the Reference Asset, the borrowing rate we pay to issue securities of this kind, and the inclusion in the price to the public of the estimated costs relating to our hedging of the Notes. These factors, together with various credit, market and economic factors over the term of the Notes, are expected to reduce the price at which you may be able to sell the Notes in any secondary market and will affect the value of the Notes in complex and unpredictable ways. Assuming no change in market conditions or any other relevant factors, the price, if any, at which you may be able to sell your Notes prior to maturity may be less than your original purchase price, as any such sale price would not be expected to include the hedging costs relating to the Notes. In addition to bid-ask spreads, the value of the Notes determined for any secondary market price is expected to be based on the secondary rate rather than the internal funding rate used to price the Notes and determine the initial estimated value. As a result, the secondary price will be less than if the internal funding rate was used. The Notes are not designed to be short-term trading instruments. Accordingly, you should be able and willing to hold your Notes to maturity.

**The Initial Estimated Value of the Notes on the Cover Page and that We Will Provide in the Final Pricing Supplement Are Estimates Only, Calculated as of the Time the Terms of the Notes Are Set –** The initial estimated value of the Notes will be 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 estimates are 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 Pricing Date will vary based on many factors, including changes in market conditions, and cannot be predicted with accuracy. As a result, the actual value you would receive if you sold the Notes in any secondary market, if any, should be expected to differ materially from the initial estimated value of your Notes.

**Market Disruption Events and Adjustments –** The Payment at Maturity and the Averaging Dates, including the Valuation Date, are subject to adjustment as described in the product prospectus supplement. For a description of what constitutes a market disruption event as well as the consequences of that market disruption event, see “General Terms of the Notes—Market Disruption Events” in the product prospectus supplement.

Geared Buffered Fixed Coupon Notes with  
Averaging Linked to the S&P 500<sup>®</sup> Index,  
Due March 8, 2021

#### ADDITIONAL TERMS OF THE NOTES

##### Market Disruption Events

If a market disruption event occurs or is continuing on any scheduled Averaging Date (other than the final Averaging Date), the closing level of the Reference Asset for that Averaging Date will equal the closing level of the Reference Asset on the first trading day following that Averaging Date on which the calculation agent determines that a market disruption event is not continuing. If a market disruption event occurs or is continuing on each trading day to and including the tenth trading day following that Averaging Date, the closing level of the Reference Asset for that Averaging Date will be determined (or, if not determinable, estimated by the calculation agent in a manner which is considered commercially reasonable under the circumstances) by the calculation agent on that tenth trading day, regardless of the occurrence or continuation of a market disruption event on that day. In such an event, the calculation agent will make a good faith estimate in its sole discretion of the closing level of the Reference Asset for that Averaging Date that would have prevailed in the absence of the market disruption event.

For a description of the impact of a market disruption event on the final Averaging Date (the Valuation Date), see “General Terms of the Notes—Market Disruption Events” in the product prospectus supplement.

##### Discontinuance of the Publication of or Material Modification to the Reference Asset on an Averaging Date

If S&P Dow Jones Indices LLC (the “Index Sponsor”) discontinues publication of the Reference Asset and the Index Sponsor or another entity publishes a successor or substitute index that the calculation agent determines, in its sole discretion, to be comparable to the discontinued index (such successor or substitute index being referred to in this section as a “successor index”), then any subsequent closing level of the Reference Asset will be determined by reference to the published level of that successor index at the regular weekday close of trading on the applicable Averaging Date.

Upon any selection by the calculation agent of a successor index, the calculation agent will provide written notice to the trustee of the selection, and the trustee will furnish written notice thereof, to the extent the trustee is required to under the senior debt indenture, to each noteholder, or in the case of global notes, the depositary, as holder of the global notes.

If a successor index is selected by the calculation agent, that successor index will be used as a substitute for the Reference Asset for all purposes, including for purposes of determining whether a market disruption event exists with respect to the Reference Asset.

If the Index Sponsor discontinues publication of the Reference Asset prior to, and that discontinuance is continuing on, any Averaging Date and the calculation agent determines, in its sole discretion, that no successor index is available at that time, then the calculation agent will determine the closing level of the Reference Asset for the relevant Averaging Date in accordance with the formula for and method of calculating the Reference Asset last in effect prior to the discontinuance, without rebalancing or substitution, using the closing level (or, if trading in the relevant underlying securities or components of the Reference Asset have been materially suspended or materially limited, its good faith estimate of the closing level that would have prevailed but for that suspension or limitation) at the close of the principal trading session of the relevant exchange on that date of each security or component most recently comprising the Reference Asset.

If at any time the method of calculating a closing level for the Reference Asset or a successor index is changed in a material respect, or if the Reference Asset is in any other way modified so that the Reference Asset does not, in the opinion of the calculation agent, fairly represent the level of the Reference Asset had those changes or modifications not been made, then, from and after that time, the calculation agent will, at the close of business in New York City on the applicable Averaging Date, make such calculations and adjustments as, in the good faith judgment of the calculation



Geared Buffered Fixed Coupon Notes with  
Averaging Linked to the S&P 500® Index,  
Due March 8, 2021

agent, may be necessary in order to arrive at a level of the Reference Asset comparable to the Reference Asset as if those changes or modifications had not been made. Accordingly, if the method of calculating the Reference Asset is modified so that the level of the Reference Asset is a fraction of what it would have been if it had not been modified (e.g., due to a split in the Reference Asset), then the calculation agent will adjust the Reference Asset in order to arrive at a level of the Reference Asset as if it had not been modified (e.g., as if such split had not occurred).

Notwithstanding these alternative arrangements, discontinuance of the publication of or material modification to the Reference Asset may adversely affect the value of the Notes.

P-10 RBC Capital Markets, LLC

---

Geared Buffered Fixed Coupon Notes with  
Averaging Linked to the S&P 500<sup>®</sup> Index,  
Due March 8, 2021

#### INFORMATION REGARDING THE REFERENCE ASSET

All disclosures contained in this terms supplement regarding the Reference Asset, including, without limitation, its make-up, method of calculation, and changes in its components, have been derived from publicly available sources. The information reflects the policies of, and is subject to change by, S&P Dow Jones Indices LLC (“S&P”). S&P, which owns the copyright and all other rights to the Reference Asset, has no obligation to continue to publish, and may discontinue publication of, the Reference Asset. The consequences of S&P discontinuing publication of the Reference Asset are discussed in the section of the product prospectus supplement entitled “General Terms of the Notes—Unavailability of the Level of the Reference Asset on a Valuation Date.” Neither we nor RBCCM accepts any responsibility for the calculation, maintenance or publication of the Reference Asset or any successor index. The Reference Asset is intended to provide an indication of the pattern of common stock price movement. The calculation of the level of the Reference Asset is based on the relative value of the aggregate market value of the common stocks of 500 companies as of a particular time compared to the aggregate average market value of the common stocks of 500 similar companies during the base period of the years 1941 through 1943.

S&P chooses companies for inclusion in the Reference Asset with the aim of achieving a distribution by broad industry groupings that approximates the distribution of these groupings in the common stock population of its Stock Guide Database of over 10,000 companies, which S&P uses as an assumed model for the composition of the total market. Relevant criteria employed by S&P include the viability of the particular company, the extent to which that company represents the industry group to which it is assigned, the extent to which the market price of that company’s common stock generally is responsive to changes in the affairs of the respective industry, and the market value and trading activity of the common stock of that company. S&P from time to time, in its sole discretion, may add companies to, or delete companies from, the Reference Asset to achieve the objectives stated above.

S&P calculates the Reference Asset by reference to the prices of the constituent stocks of the Reference Asset without taking account of the value of dividends paid on those stocks. As a result, the return on the Notes will not reflect the return you would realize if you actually owned the Reference Asset constituent stocks and received the dividends paid on those stocks.

Effective with the September 2015 rebalance, consolidated share class lines will no longer be included in the Reference Asset. Each share class line will be subject to public float and liquidity criteria individually, but the company’s total market capitalization will be used to evaluate each share class line. This may result in one listed share class line of a company being included in the Reference Asset while a second listed share class line of the same company is excluded.

#### Computation of the Reference Asset

While S&P currently employs the following methodology to calculate the Reference Asset, no assurance can be given that S&P will not modify or change this methodology in a manner that may affect the Payment at Maturity.

Historically, the market value of any component stock of the Reference Asset was calculated as the product of the market price per share and the number of then outstanding shares of such component stock. In March 2005, S&P began shifting the Reference Asset halfway from a market capitalization weighted formula to a float-adjusted formula, before moving the Reference Asset to full float adjustment on September 16, 2005. S&P’s criteria for selecting stocks for the Reference

Geared Buffered Fixed Coupon Notes with  
Averaging Linked to the S&P 500® Index,  
Due March 8, 2021

Asset did not change with the shift to float adjustment. However, the adjustment affects each company's weight in the Reference Asset.

Under float adjustment, the share counts used in calculating the Reference Asset reflect only those shares that are available to investors, not all of a company's outstanding shares. Float adjustment excludes shares that are closely held by control groups, other publicly traded companies or government agencies.

In September 2012, all shareholdings representing more than 5% of a stock's outstanding shares, other than holdings by "block owners," were removed from the float for purposes of calculating the Reference Asset. Generally, these "control holders" will include officers and directors, private equity, venture capital and special equity firms, other publicly traded companies that hold shares for control, strategic partners, holders of restricted shares, ESOPs, employee and family trusts, foundations associated with the company, holders of unlisted share classes of stock, government entities at all levels (other than government retirement/pension funds) and any individual person who controls a 5% or greater stake in a company as reported in regulatory filings. However, holdings by block owners, such as depositary banks, pension funds, mutual funds and ETF providers, 401(k) plans of the company, government retirement/pension funds, investment funds of insurance companies, asset managers and investment funds, independent foundations and savings and investment plans, will ordinarily be considered part of the float.

Treasury stock, stock options, restricted shares, equity participation units, warrants, preferred stock, convertible stock, and rights are not part of the float. Shares held in a trust to allow investors in countries outside the country of domicile, such as depositary shares and Canadian exchangeable shares are normally part of the float unless those shares form a control block. If a company has multiple classes of stock outstanding, shares in an unlisted or non-traded class are treated as a control block.

For each stock, an investable weight factor ("IWF") is calculated by dividing the available float shares by the total shares outstanding. As of September 21, 2012, available float shares are defined as the total shares outstanding less shares held by control holders. This calculation is subject to a 5% minimum threshold for control blocks. For example, if a company's officers and directors hold 3% of the company's shares, and no other control group holds 5% of the company's shares, S&P would assign that company an IWF of 1.00, as no control group meets the 5% threshold. However, if a company's officers and directors hold 3% of the company's shares and another control group holds 20% of the company's shares, S&P would assign an IWF of 0.77, reflecting the fact that 23% of the company's outstanding shares are considered to be held for control. For companies with multiple classes of stock, S&P calculates the weighted average IWF for each stock using the proportion of the total company market capitalization of each share class as weights.

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

Geared Buffered Fixed Coupon Notes with  
Averaging Linked to the S&P 500® Index,  
Due March 8, 2021

#### Index Maintenance

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

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

Changes in a company's shares outstanding of 5.00% or more due to mergers, acquisitions, public offerings, tender offers, Dutch auctions, or exchange offers are made as soon as reasonably possible. All other changes of 5.00% or more (due to, for example, company stock repurchases, private placements, redemptions, exercise of options, warrants, conversion of preferred stock, notes, debt, equity participation units, at the market offerings, or other recapitalizations) are made weekly and are announced on Fridays for implementation after the close of trading on the following Friday. Changes of less than 5.00% due to a company's acquisition of another company in the Reference Asset are made as soon as reasonably possible. All other changes of less than 5.00% are accumulated and made quarterly on the third Friday of March, June, September, and December, and are usually announced two to five days prior.

Changes in IWFs of more than five percentage points caused by corporate actions (such as merger and acquisition activity, restructurings, or spinoffs) will be made as soon as reasonably possible. Other changes in IWFs will be made annually when IWFs are reviewed.

#### License Agreement

S&P® is a registered trademark of Standard & Poor's Financial Services LLC and Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"). These trademarks have been licensed for use by S&P. "Standard & Poor®s", "S&P 500" and "S&P" are trademarks of Standard & Poor's Financial Services LLC. These trademarks have been sublicensed for certain purposes by us. The Reference Asset is a product of S&P and/or its affiliates and has been licensed for use by us.

The Notes are not sponsored, endorsed, sold or promoted by S&P Dow Jones Indices LLC, Standard & Poor's Financial Services LLC or any of their respective affiliates (collectively, "S&P Dow Jones Indices"). S&P Dow Jones Indices make no representation or warranty, express or implied, to the holders of the Notes or any member of the public regarding the advisability of investing in securities generally or in the Notes particularly or the ability of the Reference Asset to track general market performance. S&P Dow Jones Indices' only relationship to us with respect to the Reference Asset is the licensing of the Reference Asset and certain trademarks, service marks and/or trade names of S&P Dow Jones Indices and/or its third party licensors. The Reference Asset is determined, composed and calculated by S&P Dow Jones Indices without regard to us or the Notes. S&P Dow Jones Indices have no obligation to take our needs or the needs of holders of the Notes into consideration in determining, composing or calculating the Reference Asset. S&P Dow Jones Indices are not responsible for and have not participated in the determination of the prices, and amount of the Notes or the timing of the issuance or sale of the Notes or in the determination or calculation of the equation by which the Notes are to be converted into cash. S&P Dow Jones Indices have no obligation or liability in connection with the administration,

Geared Buffered Fixed Coupon Notes with  
Averaging Linked to the S&P 500® Index,  
Due March 8, 2021

marketing or trading of the Notes. There is no assurance that investment products based on the Reference Asset will accurately track index performance or provide positive investment returns. S&P Dow Jones Indices LLC and its subsidiaries are not investment advisors. Inclusion of a security or futures contract within an index is not a recommendation by S&P Dow Jones Indices to buy, sell, or hold such security or futures contract, nor is it considered to be investment advice. Notwithstanding the foregoing, CME Group Inc. and its affiliates may independently issue and/or sponsor financial products unrelated to the Notes currently being issued by us, but which may be similar to and competitive with the Notes. In addition, CME Group Inc. and its affiliates may trade financial products which are linked to the performance of the Reference Asset. It is possible that this trading activity will affect the value of the Notes.

S&P DOW JONES INDICES DO NOT GUARANTEE THE ADEQUACY, ACCURACY, TIMELINESS AND/OR THE COMPLETENESS OF THE REFERENCE ASSET OR ANY DATA RELATED THERETO OR ANY COMMUNICATION, INCLUDING BUT NOT LIMITED TO, ORAL OR WRITTEN COMMUNICATION (INCLUDING ELECTRONIC COMMUNICATIONS) WITH RESPECT THERETO. S&P DOW JONES INDICES SHALL NOT BE SUBJECT TO ANY DAMAGES OR LIABILITY FOR ANY ERRORS, OMISSIONS, OR DELAYS THEREIN. S&P DOW JONES INDICES MAKE NO EXPRESS OR IMPLIED WARRANTIES, AND EXPRESSLY DISCLAIMS ALL WARRANTIES, OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR USE OR AS TO RESULTS TO BE OBTAINED BY US, HOLDERS OF THE NOTES, OR ANY OTHER PERSON OR ENTITY FROM THE USE OF THE REFERENCE ASSET OR WITH RESPECT TO ANY DATA RELATED THERETO. WITHOUT LIMITING ANY OF THE FOREGOING, IN NO EVENT WHATSOEVER SHALL S&P DOW JONES INDICES BE LIABLE FOR ANY INDIRECT, SPECIAL, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES INCLUDING BUT NOT LIMITED TO, LOSS OF PROFITS, TRADING LOSSES, LOST TIME OR GOODWILL, EVEN IF THEY HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, WHETHER IN CONTRACT, TORT, STRICT LIABILITY, OR OTHERWISE. THERE ARE NO THIRD PARTY BENEFICIARIES OF ANY AGREEMENTS OR ARRANGEMENTS BETWEEN S&P DOW JONES INDICES AND US, OTHER THAN THE LICENSORS OF S&P DOW JONES INDICES.

P-14 RBC Capital Markets, LLC

---



Geared Buffered Fixed Coupon Notes with  
Averaging Linked to the S&P 500® Index,  
Due March 8, 2021

#### Historical Information

The graph below sets forth the information relating to the historical performance of the Reference Asset. In addition, below the graph is a table setting forth the intra-day high, intra-day low and period-end closing levels of the Reference Asset. The information provided in this table is for the four calendar quarters of 2012, 2013, 2014, 2015, 2016 and the period from January 1, 2017 through February 9, 2017.

We obtained the information regarding the historical performance of the Reference Asset in the chart below from Bloomberg Financial Markets.

We have not independently verified the accuracy or completeness of the information obtained from Bloomberg Financial Markets. The historical performance of the Reference Asset should not be taken as an indication of its future performance, and no assurance can be given as to the level of the Reference Asset on any Averaging Date or on the Valuation Date. We cannot give you assurance that the performance of the Reference Asset will result in any positive return on your initial investment.

S&P 500® Index (“SPX”)

P-15 RBC Capital Markets, LLC

---

Geared Buffered Fixed Coupon Notes with  
Averaging Linked to the S&P 500® Index,  
Due March 8, 2021

Period-Start Date	Period-End Date	High Intra-Day Level of the Reference Asset	Low Intra-Day Level of the Reference Asset	Period-End Closing Level of the Reference Asset
1/1/2012	3/31/2012	1,419.15	1,258.86	1,408.47
4/1/2012	6/30/2012	1,422.38	1,266.74	1,362.16
7/1/2012	9/30/2012	1,474.51	1,325.41	1,440.67
10/1/2012	12/31/2012	1,470.96	1,343.35	1,426.19
1/1/2013	3/31/2013	1,570.28	1,426.19	1,569.19
4/1/2013	6/30/2013	1,687.18	1,536.03	1,606.28
7/1/2013	9/30/2013	1,729.86	1,604.57	1,681.55
10/1/2013	12/31/2013	1,849.44	1,646.47	1,848.36
1/1/2014	3/31/2014	1,883.97	1,737.92	1,872.34
4/1/2014	6/30/2014	1,968.17	1,814.36	1,960.23
7/1/2014	9/30/2014	2,019.26	1,904.78	1,972.29
10/1/2014	12/31/2014	2,093.55	1,820.66	2,058.90
1/1/2015	3/31/2015	2,119.59	1,980.90	2,067.89
4/1/2015	6/30/2015	2,134.72	2,048.38	2,063.11
7/1/2015	9/30/2015	2,132.82	1,867.01	1,920.03
10/1/2015	12/31/2015	2,116.48	1,893.70	2,043.94
1/1/2016	3/31/2016	2,072.21	1,810.10	2,059.74
4/1/2016	6/30/2016	2,120.55	1,937.09	2,098.86
7/1/2016	9/30/2016	2,193.81	2,074.02	2,168.27
10/1/2016	12/30/2016	2,277.53	2,083.79	2,238.83
1/1/2017	2/9/2017	2,311.08	2,245.13	2,307.87

PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS.

P-16 RBC Capital Markets, LLC

---

Geared Buffered Fixed Coupon Notes with  
Averaging Linked to the S&P 500® Index,  
Due March 8, 2021

#### SUPPLEMENTAL DISCUSSION OF U.S. FEDERAL INCOME TAX CONSEQUENCES

The discussion in the product prospectus supplement dated January 12, 2016 under “Supplemental Discussion of U.S. Federal Income Tax Consequences” is replaced and superseded by, the discussion below.

This summary is directed solely to holders that will purchase the Notes upon original issuance and will hold the Notes as capital assets within the meaning of Section 1221 of the Internal Revenue Code, which generally means property held for investment. It applies only to those holders who are not excluded from the discussion of U.S. federal income taxation in the accompanying prospectus. We intend to treat Coupon Payments as U.S. source income for U.S. federal income tax purposes.

Although the U.S. federal income tax treatment of the Notes is uncertain, we intend to take the position, and the following discussion assumes, that the Notes are properly treated as an investment unit consisting of a Debt Portion and a Put Option. It is likely that the Debt Portion of your Notes would be treated as having been issued for the principal amount of the Notes and that Coupon Payments on the Notes would be treated in part as payments of interest and in part as payments for the Put Option.

Pursuant to this treatment, [ ]% of each stated Coupon Payment (1.25% to 1.55% in total, to be determined on the pricing date) will be treated as an interest payment and [ ]% of each stated Coupon Payment will be treated as payment for the Put Option for U.S. federal income tax purposes.

Alternative treatments of the Notes are possible. There is no judicial or administrative authority discussing how your Notes should be treated for U.S. federal income tax purposes. Therefore, other treatments would also be reasonable and the Internal Revenue Service might assert that treatment other than that described above is more appropriate. For example, it is possible that your Note could be treated as a single debt instrument subject to the special tax rules governing contingent payment debt instruments. If your Note is so treated, you would be required to accrue interest income over the term of your Note based upon the yield at which we would issue a non-contingent fixed-rate debt instrument with other terms and conditions similar to your Note. You would recognize gain or loss upon the sale, call or maturity of your Note in an amount equal to the difference, if any, between the amount you receive at such time and your adjusted basis in your Note. In general, your adjusted basis in your Note would be equal to the amount you paid for your Note, increased by the amount of interest you previously accrued with respect to your Note. Any gain you recognize upon the sale, call or maturity of your Note would generally be ordinary income and any loss recognized by you at such time would generally be ordinary loss to the extent of interest you included in income in the current or previous taxable years with respect to your Note, and thereafter would be capital loss. The deductibility of capital losses is subject to limitations.

In addition, the Internal Revenue Service has released a notice that may affect the taxation of holders of “prepaid forward contracts” and similar instruments. According to the notice, the Internal Revenue Service and the U.S. Treasury Department are actively considering whether the holder of such instruments should be required to accrue ordinary income on a current basis. While it is not clear whether the Notes would be viewed as similar to such instruments, it is possible that any future guidance could materially and adversely affect the tax consequences of an investment in the Notes, possibly with retroactive effect.

Because of the absence of authority regarding the appropriate tax characterization of your Note, it is possible that the Internal Revenue Service could seek to characterize your Note in a manner that results in tax consequences to you that are different from those described above. For example, it is possible that you may be required to include the entire Coupon Payment into income when it is received. It is also possible that your Note may be characterized in whole or in

Geared Buffered Fixed Coupon Notes with  
Averaging Linked to the S&P 500® Index,  
Due March 8, 2021

part as a notional principal contract or as a different type of derivative contract. You should consult your tax advisor as to the tax consequences of possible alternative characterizations of your Note for U.S. federal income tax purposes.

**U.S. Holders**

Amounts treated as interest would be included in income in accordance with your regular method of accounting for interest for U.S. federal income tax purposes. Amounts treated as payment for the Put Option would be deferred and accounted for upon the sale, call or maturity of the Notes, as discussed below.

If you were to receive a cash payment of the full principal amount of your Notes upon the call or maturity of your Notes, such payment would likely be treated as (i) payment in full of the principal amount of the Debt Portion and (ii) the lapse of the Put Option which would likely result in your recognition of short-term capital gain in an amount equal to the amount paid to you for the Put Option and deferred as described above. If you were to receive a cash payment upon the maturity of your Notes (excluding cash received as a Coupon Payment) of less than the full principal amount of your Notes, such payment would likely be treated as (i) payment in full of the principal amount of the Debt Portion and (ii) the cash settlement of the Put Option pursuant to which you paid to us an amount equal to the excess of the principal amount of your Notes over the amount that you received upon the maturity of your Notes (excluding cash received as a Coupon Payment) in order to settle the Put Option. If the aggregate amount paid to you for the Put Option and deferred as described above is greater than the amount you are deemed to have paid to us to settle the Put Option, you will likely recognize short-term capital gain in an amount that is equal to such excess. Conversely, if the amount paid to you for the Put Option and deferred as described above is less than the amount you are deemed to have paid to us to settle the Put Option, you will likely recognize short-term capital loss in an amount that is equal to such difference. The deductibility of capital losses is subject to limitations.

**Sale or Exchange Prior to Maturity**

Upon the sale of your Notes, you would be required to apportion the value of the amount you receive between the Debt Portion and Put Option on the basis of the values thereof on the date of the sale. You would recognize gain or loss with respect to the Debt Portion in an amount equal to the difference between (i) the amount apportioned to the Debt Portion and (ii) your adjusted U.S. federal income tax basis in the Debt Portion. Except to the extent attributable to accrued but unpaid interest with respect to the Debt Portion, such gain or loss would be long-term capital gain or loss if your holding period is greater than one year. The amount of cash that you receive that is apportioned to the Put Option (together with any amount of premium received in respect thereof and deferred as described above) would be treated as short-term capital gain. If the value of the Debt Portion on the date of the sale of your Notes is in excess of the amount you receive upon such sale, you would likely be treated as having made a payment (to the purchaser in the case of a sale) equal to the amount of such excess in order to extinguish your rights and obligations under the Put Option. In such a case, you would likely recognize short-term capital gain or loss in an amount equal to the difference between the premium you previously received in respect of the Put Option and the amount of the deemed payment made by you to extinguish the Put Option. The deductibility of capital losses is subject to limitations.

**Non-U.S. Holders**

The following discussion applies to Non-U.S. holders of the Notes. You are a Non-U.S. holder if you are a beneficial owner of a Note and are for U.S. federal income tax purposes a non-resident alien individual, a foreign corporation, or a foreign estate or trust.

Because the U.S. federal income tax treatment of the Notes (including the Coupon Payments) is uncertain, we will withhold U.S. federal income tax at a 30% rate (or at a lower rate under an applicable income tax treaty) on the entire

Geared Buffered Fixed Coupon Notes with  
Averaging Linked to the S&P 500<sup>®</sup> Index,  
Due March 8, 2021

amount of the Coupon Payments. We will not pay any additional amounts in respect of such withholding. To claim benefits under an income tax treaty, a Non-U.S. Holder must obtain a taxpayer identification number and certify as to its eligibility under the appropriate treaty's limitations on benefits article, if applicable. In addition, special rules may apply to claims for treaty benefits made by Non-U.S. Holders that are entities rather than individuals. The availability of a lower rate of withholding under an applicable income tax treaty will depend on whether such rate applies to the characterization of the payments under U.S. federal income tax laws. A Non-U.S. Holder that is eligible for a reduced rate of U.S. federal withholding tax pursuant to an income tax treaty may obtain a refund of any excess amounts withheld by filing an appropriate claim for refund with the IRS.

Except as discussed below, a Non-U.S. Holder will not be subject to U.S. federal income or withholding tax on any gain (not including for the avoidance of doubt any amounts representing accrued Coupon Payments which would be subject to the rules discussed in the previous paragraph) from the sale or exchange of the Notes or their settlement at maturity, provided that the Non-U.S. Holder complies with applicable certification requirements and that the payment is not effectively connected with the conduct by the Non-U.S. Holder of a U.S. trade or business. Notwithstanding the foregoing, gain from the sale or exchange of the Notes or their settlement at maturity may be subject to U.S. federal income tax if that Non-U.S. Holder is a non-resident alien individual and is present in the United States for 183 days or more during the taxable year of the sale, exchange, or retirement and certain other conditions are satisfied.

If a Non-U.S. Holder of the Notes is engaged in the conduct of a trade or business within the United States and if Coupon Payments and gain realized on the sale, exchange, or settlement of the Notes, is effectively connected with the conduct of such trade or business (and, if certain tax treaties apply, is attributable to a permanent establishment maintained by the Non-U.S. Holder in the United States), the Non-U.S. Holder, although exempt from U.S. federal withholding tax, generally will be subject to U.S. federal income tax on such Coupon Payments and gain on a net income basis in the same manner as if it were a U.S. Holder. Such Non-U.S. Holders should read the material under the heading "U.S. Holders" for a description of the U.S. federal income tax consequences of acquiring, owning, and disposing of the Notes. In addition, if such Non-U.S. Holder is a foreign corporation, it may also be subject to a branch profits tax equal to 30% (or such lower rate provided by any applicable tax treaty) of a portion of its earnings and profits for the taxable year that are effectively connected with its conduct of a trade or business in the United States, subject to certain adjustments.

A "dividend equivalent" payment is treated as a dividend from sources within the United States and 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, 2018. 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 Reference Asset 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 Reference Asset 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



Geared Buffered Fixed Coupon Notes with  
Averaging Linked to the S&P 500® Index,  
Due March 8, 2021

payments are treated as dividend equivalents subject to withholding, we (or the applicable paying agent) would be entitled to withhold taxes without being required to pay any additional amounts with respect to amounts so withheld.

Foreign Account Tax Compliance Act

The Foreign Account Tax Compliance Act (“FATCA”) imposes a 30% U.S. withholding tax on certain U.S. source payments, including interest (and OID), dividends, other fixed or determinable annual or periodical gain, profits, and income, and on the gross proceeds from a disposition of property of a type which can produce U.S. source interest or dividends (“Withholdable Payments”), if paid to a foreign financial institution (including amounts paid to a foreign financial institution on behalf of a holder), unless such institution enters into an agreement with the U.S. Treasury Department to collect and provide to the U.S. Treasury Department certain information regarding U.S. financial account holders, including certain account holders that are foreign entities with U.S. owners, with such institution or otherwise complies with FATCA. In addition, the Notes may constitute a “financial account” for these purposes and thus, be subject to information reporting requirements pursuant to FATCA. FATCA also generally imposes a withholding tax of 30% on Withholdable Payments made to a non-financial foreign entity unless such entity provides the withholding agent with a certification that it does not have any substantial U.S. owners or a certification identifying the direct and indirect substantial U.S. owners of the entity. Under certain circumstances, a holder may be eligible for refunds or credits of such taxes.

The U.S. Treasury Department and the IRS have announced that withholding on payments of gross proceeds from a sale or redemption of the Notes will only apply to payments made after December 31, 2018. If we determine withholding is appropriate with respect to the Notes, we will withhold tax at the applicable statutory rate, and we will not pay any additional amounts in respect of such withholding. Foreign financial institutions and non-financial foreign entities located in jurisdictions that have an intergovernmental agreement with the United States governing FATCA may be subject to different rules. Prospective investors are urged to consult with their own tax advisors regarding the possible implications of FATCA on their investment in the Notes.

P-20 RBC Capital Markets, LLC

---

Geared Buffered Fixed Coupon Notes with  
Averaging Linked to the S&P 500® Index,  
Due March 8, 2021

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

We expect that delivery of the Notes will be made against payment for the Notes on or about March 8, 2017, which is the third (3rd) business day following the Pricing Date (this settlement cycle being referred to as “T+3”). See “Plan of Distribution” in the prospectus dated January 8, 2016. 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. We may use this terms supplement in the initial sale of the Notes. In addition, RBCCM or another of our affiliates may use this terms supplement in a market-making transaction in the Notes after their initial sale. Unless we or our agent informs the purchaser otherwise in the confirmation of sale, this terms supplement is being used in a market-making transaction.

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 three months after the Issue Date of the Notes, the value of the Notes that may be shown on your account statement is expected to 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 our hedging costs and profits; however, the value of the Notes shown on your account statement during that period is initially expected to be a higher amount, reflecting the addition of our estimated costs and profits from hedging the Notes. This excess is expected to decrease over time until the end of this period. After this period, if RBCCM repurchases your Notes, it expects to do so at prices that reflect their estimated value.

#### STRUCTURING THE NOTES

The Notes are our debt securities, the return on which is linked to the performance of the Reference Asset. 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 is likely to reduce the initial estimated value of the Notes at the time their terms are set. Unlike the estimated value included in this terms supplement or in the final pricing supplement, any value of the Notes determined for purposes of a secondary market transaction may be based on a different funding rate, which may result in a lower value for the Notes than if our initial internal funding rate were used.

In order to satisfy our payment obligations under the Notes, we may choose to enter into certain hedging arrangements (which may include call options, put options or other derivatives) on the Issue Date with RBCCM or one of our other subsidiaries. The terms of these hedging arrangements take into account a number of factors, including our creditworthiness, interest rate movements, the volatility of the Reference Asset, 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 reduces the economic terms of the Notes to you. The initial offering price of the Notes also reflects our estimated hedging costs. These factors result in the initial estimated value for the Notes on the Pricing Date being less than their public offering price. See “Selected Risk Considerations—The Initial Estimated Value of the Notes Will Be Less than the Price to the Public” above.



**EQUITY LINKED NOTE I RBC STRUCTURED NOTES GROUP Geared Buffered Fixed Coupon Notes with Averaging Linked to the S&P 500® Index, Due March 8, 2021 INVESTMENT THESIS** Receive a semi-annual Coupon Payment at a rate of 1.25% to 1.55% per annum (to be determined on the pricing date). Receive a return equal to the Average Percentage Change if the Final Percentage Change is greater than or equal to -20%. Lose some or all of the principal amount if the Final Percentage Change is less than -20% and the Average Percentage Change is not high enough to offset the leveraged difference between the Final Percentage Change and the Buffer Percentage of 20%.

**PRELIMINARY KEY TERMS** Reference Asset: S&P 500® Index (SPX) Coupon Rate: [1.25% - 1.55%] per annum (to be determined on the pricing date) Buffer Percentage: 20% Downside Leverage Factor: 1.25 Final Percentage Change: Average Percentage Change: , subject to a minimum value of zero Averaging Dates for determining the Average Level: June 3, 2020, September 3, 2020, December 3, 2020 and March 3, 2021 (the Valuation Date) **KEY RISK FACTORS** The notes are subject to Royal Bank of Canada's credit risk. The notes are not principal protected. Your notes are likely to have limited liquidity. **TAX** Each investor will agree to treat the notes as an investment unit consisting of (i) a non-contingent debt instrument issued by us to you (the "Debt Portion") and (ii) a put option with respect to the Reference Asset written by you and purchased by us (the "Put Option") for U.S. federal income tax purposes, as described in more detail in the terms supplement. **ORDER DEADLINE** RBCCM will accept orders to purchase the notes until March 3, 2017 **COUPON PAYMENTS** In addition to the Payment at Maturity, the investor will receive a Coupon Payment semi-annually, regardless of the performance of the Reference Asset. **DETERMINING PAYMENT AT MATURITY** Determine the Final Percentage Change and the Average Percentage Change Is the Final Percentage Change greater than or equal to -20%? Yes You will receive at maturity, per \$1,000 in principal amount of the notes:  $\$1,000 + (\$1,000 \times \text{Average Percentage Change})$  In such a case, because the minimum Average Percentage Change is zero, the Payment at Maturity will not be less than \$1,000 per \$1,000 in principal amount. No You will receive at maturity, per \$1,000 in principal amount of the notes:  $\$1,000 + \{ \$1,000 \times [(\text{Final Percentage Change} + \text{Buffer Percentage}) \times \text{Downside Leverage Factor}] + \text{Average Percentage Change} \}$  In such a case, the return on the Notes could be negative, and you will lose up to 100% of the principal amount if the Average Percentage Change does not offset the leveraged difference between the Final Percentage Change and the Buffer Percentage. CUSIP: 78012KA49 PRICING DATE: March 3, 2017 ISSUE DATE: March 8, 2017

---