ROYAL BANK OF CANADA
Form FWP
October 18, 2018

Free Writing Prospectus (To the Prospectus dated September 7, 2018, the Prospectus Supplement dated September 7, 2018, and the Product Prospectus Supplement dated October 18, 2018)	Filed Pursuant to Rule 433 Registration No. 333-227001 October 18, 2018

Royal Bank of Canada	$ Contingent Digital Return Barrier Notes due November 5, 2019 Linked to the Common Stock of Facebook, Inc. Senior Global Medium-Term Notes, Series H

General

- The Notes are designed for investors who seek to receive a Contingent Digital Return at maturity based on the performance of the common stock of Facebook, Inc. (the "Reference Asset"). Investors should be willing to forgo interest and dividend payments and, if the price of the Reference Asset declines by more than 20%, be willing to (i) lose some or all of their principal and (ii) receive physical delivery of shares of the Reference Asset in lieu of cash.
- Senior unsecured obligations of Royal Bank of Canada maturing on November 5, 2019. [(a)] [(b)]
- Minimum denominations of $10,000 and integral multiples of $1,000 in excess thereof.
- The Notes are expected to price on or about October 18, 2018[(b)] (the "pricing date") and are expected to be issued on or about October 23, 2018[(b)] (the "issue date").

Key Terms	Terms used in this free writing prospectus, but not defined herein, will have the meanings ascribed to them in the product prospectus supplement.
Issuer:	Royal Bank of Canada
Reference Asset:	The common stock of Facebook, Inc. (Bloomberg symbol: "FB")
Contingent Digital Return:	13.05%
Payment at Maturity:	If the Percentage Change is greater than or equal to -20%, you will receive a cash payment that provides you with a return equal to the Contingent Digital Return. Accordingly, if the Final Level is greater than or equal to the Barrier Level, your payment per $1,000 in principal amount of the Notes will be calculated as follows: $1,000 + ($1,000 x Contingent Digital Return) If the Percentage Change is less than -20%, you will receive at maturity, for each $1,000 in principal amount, a number of shares of the Reference Asset equal to the Physical Delivery Amount (or at our election, the Cash Delivery Amount) In this case, the value of the shares or cash that you will receive at maturity will represent a loss of your principal that is proportionate to the decline in the price of the Reference Asset from the Initial Level to the Final Level. You will lose a significant portion, or possibly even all, of the principal amount. Any payment on the Notes, including any repayment of principal, is subject to the creditworthiness of the Issuer and is not guaranteed by any third party.
Barrier Level:	80% of the Initial Level.

Physical Delivery Amount:	For each $1,000 in principal amount, a number of shares of the Reference Asset equal to the principal amount divided by the Initial Level, subject to adjustment as described in the product prospectus supplement. If this number is not a round number, then the number of shares of the Reference Asset to be delivered will be rounded down and the fractional shares will be paid in cash.
Cash Delivery Amount:	The product of the Physical Delivery Amount multiplied by the Final Level.
Percentage Change:	The performance of the Reference Asset from the Initial Level to the Final Level, calculated as follows: $\frac{\text{Final Level} - \text{Initial Level}}{\text{Initial Level}}$
Initial Level:	The closing price of the Reference Asset on the pricing date.
Final Level:	The arithmetic average of the closing price of the Reference Asset on each of the valuation dates.
Valuation Dates:	October 25, 2019, October 28, 2019, October 29, 2019, October 30, 2019 and October 31, 2019 (the "final valuation date")[a][b]
Maturity Date:	November 5, 2019[a][b]
Calculation Agent:	RBC Capital Markets, LLC ("RBCCM")
CUSIP/ISIN:	78013XP69 /US78013XP695
Estimated Value:	The initial estimated value of the Notes as of the date of this document is $985.57 per $1,000 in principal amount. The final pricing supplement relating to the Notes will set forth our updated estimate of the initial value of the Notes as of the pricing date, which we do not expect to be more than $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.

(a) Subject to postponement if a market disruption event occurs, as described under "General Terms of the Notes—Market Disruption Events" in the product prospectus supplement.

(b) Expected. In the event we make any change to the expected pricing date and issue date, the valuation dates and the maturity date will be changed so that the stated term of the Notes remains the same.

Investing in the Notes involves a number of risks. See "Risk Factors" beginning on page PS-4 of the product prospectus supplement, beginning on page S-1 of the prospectus supplement and on page 1 of the prospectus, and "Selected Risk Considerations" beginning on page FWP-4 of this free writing prospectus.

The Notes will not be listed on any U.S. securities exchange or quotation system. Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined that this free writing prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

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.

	Price to Public[1]	Underwriting Commission[2]	Proceeds to Royal Bank of Canada
Per Note	$1,000	$10.00	$990.00
Total	$	$	$

1 Certain fiduciary accounts purchasing the Notes will pay a purchase price of $990.00 per Note, and the placement agents will forgo any fees with respect to sales made to those accounts. The price to the public for all other purchases of the Notes is 100%.

2 JPMorgan Chase Bank, N.A., J.P. Morgan Securities LLC and their affiliates will act as placement agents for the Notes and will receive a fee from the Issuer that will not exceed $10.00 per $1,000 in principal amount of the Notes, but will forgo any fees for sales to certain fiduciary accounts.

RBC Capital Markets, LLC JPMorgan Chase Bank, N.A. J.P. Morgan Securities LLC
Placement Agents

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 free writing prospectus 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. 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 1-877-688-2301.

You may revoke your offer to purchase the Notes at any time prior to the pricing as described on the cover of this free writing prospectus. 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.

ADDITIONAL TERMS OF THE NOTES

You should read this free writing prospectus together with the prospectus dated September 7, 2018, as supplemented by the prospectus supplement dated September 7, 2018 and the product prospectus supplement dated October 18, 2018, relating to our Senior Global Medium-Term Notes, Series H, of which these Notes are a part. Capitalized terms used but not defined in this free writing prospectus will have the meanings given to them in the product prospectus supplement. In the event of any conflict, this free writing prospectus will control. The Notes vary from the terms described in the product prospectus supplement in several important ways. In particular, please note that you may receive shares of the Reference Asset at maturity. You should read this free writing prospectus carefully.

This free writing prospectus, together with the documents listed below, contains the terms of the Notes and supersedes all prior or contemporaneous oral statements as well as any other written materials including preliminary or indicative pricing terms, correspondence, trade ideas, structures for implementation, sample structures, brochures or other educational materials of ours. You should carefully consider, among other things, the matters set forth in “Risk Factors” in the prospectus supplement dated September 7, 2018 and in the product prospectus supplement dated October 18, 2018, as the Notes involve risks not associated with conventional debt securities. We urge you to consult your investment, legal, tax, accounting and other advisors before you invest in the Notes. You may access these documents on the Securities and Exchange Commission (the “SEC”) website at www.sec.gov as follows (or if that address has changed, by reviewing our filings for the relevant date on the SEC website):

Prospectus dated September 7, 2018:
https://www.sec.gov/Archives/edgar/data/1000275/000121465918005973/l96181424b3.htm

Prospectus Supplement dated September 7, 2018:
https://www.sec.gov/Archives/edgar/data/1000275/000121465918005975/f97180424b3.htm

Product Prospectus Supplement ERN-ES-1 dated October 18, 2018:
https://www.sec.gov/Archives/edgar/data/1000275/000114036118040853/form424b5.htm

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

What Is the Total Return on the Notes at Maturity Assuming a Range of Performance for the Reference Asset?

The following table illustrates the hypothetical total return at maturity on the Notes. The “total return,” as used in this free writing prospectus, is the number, expressed as a percentage, that results from comparing the payment at maturity per $1,000 in principal amount of the Notes to $1,000. The hypothetical total returns and examples set forth below are based on a hypothetical Initial Level of $100.00, a hypothetical Barrier Level of $80.00, a hypothetical Physical Delivery Amount of 10 shares of the Reference Asset ($1,000 divided by $100), the Contingent Digital Return on the Notes of 13.05%, and the hypothetical Final Levels as set forth below. The actual Initial Level will be determined on the pricing date, and the actual Final Level will be determined based on the arithmetic average of the closing price of the Reference Asset on each of the valuation dates.

The hypothetical total returns and examples set forth below are for illustrative purposes only and may not be the actual total returns applicable to a purchaser of the Notes. The numbers appearing in the following table and examples have been rounded for ease of analysis. The examples below do not take into account any tax consequences from investing in the Notes.

Final Level	Percentage Change	Payment at Maturity	Total Return on the Notes[1]
$150.00	50.00%	$1,130.50	13.05%
$140.00	40.00%	$1,130.50	13.05%
$130.00	30.00%	$1,130.50	13.05%
$120.00	20.00%	$1,130.50	13.05%
$113.05	13.05%	$1,130.50	13.05%
$110.00	10.00%	$1,130.50	13.05%
$105.00	5.00%	$1,130.50	13.05%
$102.50	2.50%	$1,130.50	13.05%
$100.00	0.00%	$1,130.50	13.05%
$95.00	-5.00%	$1,130.50	13.05%
$90.00	-10.00%	$1,130.50	13.05%
$80.00	-20.00%	$1,130.50	13.05%
$70.00	-30.00%	10 shares or $700	-30.00%
$60.00	-40.00%	10 shares or $600	-40.00%
$50.00	-50.00%	10 shares or $500	-50.00%
$40.00	-60.00%	10 shares or $400	-60.00%
$30.00	-70.00%	10 shares or $300	-70.00%
$20.00	-80.00%	10 shares or $200	-80.00%
$10.00	-90.00%	10 shares or $100	-90.00%
$0.00	-100.00%	10 shares or $0	-100.00%

[1] For notes settled in Physical Delivery Amount, the “Total Return on the Notes” is calculated based on the Final Level.

Hypothetical Examples of Amounts Payable at Maturity

The following examples illustrate how the total returns set forth in the table above are calculated.

Example 1: The price of the Reference Asset increases from an Initial Level of $100.00 to a Final Level of $150.00, resulting in a Percentage Change of 50.00%.

Because the Percentage Change is greater than or equal to -20%, the investor receives a payment at maturity of $1,130.50 per $1,000 in principal amount of the Notes, calculated as follows:

$1,000 + ($1,000 x 13.05%) = $1,130.50

In this case, the return on the Notes is less than the Percentage Change of the Reference Asset.

Example 2: The price of the Reference Asset decreases from an Initial Level of $100.00 to a Final Level of $95.00, resulting in a Percentage Change of -5.00%.

Because the Percentage Change is greater than or equal to -20%, the investor receives a payment at maturity of $1,130.50 per $1,000 in principal amount of the Notes, calculated as follows:

$1,000 + ($1,000 x 13.05%) = $1,130.50

Example 3: The price of the Reference Asset decreases from an Initial Level of $100.00 to a Final Level of $60.00, resulting in a Percentage Change of -40.00%.

Because the Percentage Change is less than -20%, for each $1,000 in principal amount, the investor will receive 10 shares of the Reference Asset at maturity, or at our option, the Cash Delivery Amount, calculated as follows:

Physical Delivery Amount x Final Level = 10 x $60 = $600.00

In this case, the value of the securities or the amount of cash that will be paid on the Notes is expected to be significantly less than the principal amount.

Selected Purchase Considerations

- Appreciation Potential—The Notes provide the opportunity to receive the Contingent Digital Return if the Final Level is greater than or equal to the Barrier Level.
- Limited Protection Against Loss—Payment at maturity of the principal amount of the Notes is protected against a decline in the Final Level, as compared to the Initial Level, of up to 20%. If the Final Level is less than the Initial Level by more than 20%, the value of the shares or cash that you will receive at maturity will represent a loss of your principal that is proportionate to the decline in the price of the Reference Asset from the Initial Level to the Final Level. If you receive shares of the Reference Asset, they may decrease in value between the valuation dates and the maturity date, further reducing your return on the Notes. Because the Notes are our senior unsecured obligations, payment of any amount at maturity is subject to our ability to pay our obligations as they become due and is not guaranteed by any third party. For a description of the risks with respect to our credit, see "Selected Risk Considerations—Credit of Issuer" in this free writing prospectus.

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 "Risk Factors" 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 all or a substantial portion of their principal amount if the price of the Reference Asset decreases by more than 20%. If the Percentage Change is less than -20%, the value of the shares or cash that you will receive at maturity will represent a loss of your principal that is proportionate to the decline in the price of the Reference Asset from the Initial Level to the Final Level.
- The Notes Do Not Pay Interest and Your Return May Be Lower than the Return on a Conventional Debt Security of Comparable Maturity – There will be no periodic interest payments on the Notes as there would be on a conventional fixed-rate or floating-rate debt security having the same maturity. The return that you will receive on the Notes, which could be negative, may be less than the return you could earn on other investments. Even if your return is positive, your return may be less than the return you would earn if you bought one of our conventional senior interest bearing debt securities.
- Your Potential Payment at Maturity Is Limited – The Notes will provide less opportunity to participate in increases in the price of the Reference Asset than an investment in a security linked to the Reference Asset providing full participation in the appreciation, because any positive return on the Notes will be fixed as the Contingent Digital Return. Accordingly, your return on the Notes may be less than your return would be if you made an investment in a security directly linked to increases in the Reference Asset.
- Credit of Issuer – The Notes are our senior unsecured debt securities. As a result, your receipt of the amount due on the maturity date is dependent upon our ability to repay our obligations at that time. This will be the case even if the price of the Reference Asset increases after the pricing date. No assurance can be given as to what our financial condition will be at the maturity of the Notes.
- There May Not Be an Active Trading Market for the Notes—Sales in the Secondary Market May Result in Significant Losses – There may be little or no secondary market for the Notes. The Notes will not be listed on any securities exchange. RBCCM and our other affiliates may make a market for the Notes; however, they are not required to do so. RBCCM or any other affiliate may stop any market-making activities at any time. Even if a secondary market for the Notes develops, it may not provide significant liquidity or trade at prices advantageous to you. We expect that transaction costs in any secondary market would be high. As a result, the difference between bid and asked prices for your Notes in any secondary market could be substantial.
- If You Receive Shares of the Reference Asset at Maturity, the Value of Those Shares May Be Less on the Maturity Date than on the Final Valuation Date – If the Final Level is less than the Barrier Level, at maturity you may receive a number of shares of the Reference Asset equal to the Physical Delivery Amount. Under these circumstances, the value of the Physical Delivery Amount as of the final valuation date could be less than $800 for each $1,000 in principal amount of the Note and could decrease further during the period between the final valuation date and the maturity date. We will make no adjustments to the Physical Delivery Amount to account for any fluctuations in the price of the Reference Asset, and you will bear the risk of any decrease in the price of the Reference Asset and

consequently, the value of the Physical Delivery Amount between the final valuation date and the maturity date.

- Owning the Notes Is Not the Same as Owning Shares of the Reference Asset — The return on your Notes may not reflect the return you would realize if you actually owned shares of the Reference Asset. For instance, as a holder of the Notes, you will not have voting rights, rights to receive cash dividends or other distributions, or any other rights that holders of shares of the Reference Asset would have, unless and until you receive the

Physical Delivery Amount as payment at maturity on the Notes. Further, you will not participate in any appreciation of the price of Reference Asset above 13.05%.

- There Is No Affiliation Between Us and the Issuer of the Reference Asset, and We Are Not Responsible for any Disclosure by that Company — We are not affiliated with the issuer of the Reference Asset. However, we and our affiliates may currently, or from time to time in the future engage in business with the issuer of the Reference Asset. Nevertheless, neither we nor our affiliates assume any responsibilities for the accuracy or the completeness of any information about the Reference Asset that the issuer of the Reference Asset prepares. You, as an investor in the Notes, should make your own investigation into the Reference Asset and the issuer of the Reference Asset. The issuer of the Reference Asset is not involved in this offering and has no obligation of any sort with respect to your Notes. The issuer of the Reference Asset has no obligation to take your interests into consideration for any reason, including when taking any corporate actions that might affect the value of your Notes.
- Single Stock Risk — The price of the Reference Asset can rise or fall sharply due to factors specific to the Reference Asset and its issuer, such as stock price volatility, earnings, financial conditions, corporate, industry and regulatory developments, management changes and decisions and other events, as well as general market factors, such as general stock market volatility and levels, interest rates and economic and political conditions. We urge you to review financial and other information filed periodically with the SEC by the issuer of the Reference Asset.
- Many Economic and Market Factors Will Impact the Value of the Notes—In addition to the price of the Reference Asset on any day, the value of the Notes will be affected by a number of economic and market factors that may either offset or magnify each other, including:
- the expected volatility of the Reference Asset;
- the time to maturity of the Notes;
- the dividend rate on the Reference Asset;
- interest and yield rates in the market generally;
- a variety of economic, financial, political, regulatory or judicial events; and
- our creditworthiness, including actual or anticipated downgrades in our credit ratings.
- The Initial Estimated Value of the Notes Will Be Less than the Price to the Public – The initial estimated value 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 price 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 underwriting discount 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 your original purchase price. 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 That We Will Provide in the Final Pricing Supplement Will Be an Estimate Only, Calculated as of the Pricing Date -- 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, the valuation dates and the Reference Asset 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 on a valuation date, see “General Terms of the Notes—Market Disruption Events” in the product prospectus supplement.
- Anti-dilution Adjustments — For certain corporate events affecting the Reference Asset, the calculation agent may make adjustments to the terms of the Notes. However, the calculation agent will not make such adjustments in response to all events that could affect the Reference Asset. If an event occurs that does not require the calculation agent to make such adjustments, the value of the Notes may be materially and adversely affected. In addition, all

determinations and calculations concerning any such adjustments will be made in the sole discretion of the calculation agent, which will be binding on you absent manifest error. You should be aware that the calculation agent may make any such adjustment, determination or calculation in a manner that differs from that discussed in this free writing prospectus or the product prospectus supplement as necessary to achieve an equitable result.

- The Business Activities of Royal Bank and Our Affiliates May Create Conflicts of Interest – We and our affiliates expect to engage in trading activities related to the Reference Asset that are not for the account of holders of the Notes or on their behalf. These trading activities may present a conflict between the holders' interests in the Notes and the interests we and our affiliates will have in their proprietary accounts, in facilitating transactions, including options and other derivatives transactions, for their customers and in accounts under their management. These trading activities, if they influence the price of the Reference Asset, could be adverse to the interests of the holders of the Notes. We and one or more of our affiliates may, at present or in the future, engage in business with Facebook, Inc., the issuer of the Reference Asset (the ''Reference Asset Issuer''), including making loans to or providing advisory services. These services could include investment banking and merger and acquisition advisory services. These activities may present a conflict between our or one or more of our affiliates' obligations, and your interests as a holder of the Notes. Moreover, we and our affiliates may have published, and in the future expect to publish, research reports with respect to the Reference Asset. This research is modified from time to time without notice and may express opinions or provide recommendations that are inconsistent with purchasing or holding the Notes. Any of these activities may affect the price of the Reference Asset and, therefore, the market value of the Notes.

Additionally, we or our affiliates may serve as issuer, agent or underwriter for additional issuances of securities with returns linked or related to changes in the price of the Reference Asset. By introducing competing products into the marketplace in this manner, we could adversely affect the value of the Notes.

We may hedge our obligations under the Notes through certain affiliates, who would expect to make a profit on such hedge. We or our affiliates may adjust these hedges by, among other things, purchasing or selling those assets at any time, including around the time of the valuation dates, which could have an impact on the return of the Notes. Because hedging our obligations entails risk and may be influenced by market forces beyond our or our affiliates' control, such hedging may result in a profit that is more or less than expected, or it may result in a loss.

Information Regarding the Issuer of the Reference Asset

The Reference Asset is registered under the Securities Exchange Act of 1934 (the "Exchange Act"). Companies with securities registered under that Act are required to file periodically certain financial and other information specified by the Securities and Exchange Commission (the "SEC"). Information provided to or filed with the SEC can be inspected and copied at the public reference facilities maintained by the SEC or through the SEC's website at www.sec.gov. In addition, information regarding the Reference Asset may be obtained from other sources including, but not limited to, press releases, newspaper articles and other publicly disseminated documents.

The following information regarding the issuer of the Reference Asset is derived from publicly available information. We have not independently verified the accuracy or completeness of reports filed by the issuer of the Reference Asset with the SEC, information published by it on its website or in any other format, information about it obtained from any other source or the information provided below.

According to publicly available information, Facebook, Inc. operates a social networking website. The company website allows people to communicate with their family, friends, and co-workers. The company develops technologies that facilitate the sharing of information, photographs, website links, and videos.

Below is a table setting forth the intra-day high, intra-day low and period-end closing prices of the Reference Asset. The information provided in the table is for the period from January 1, 2013 through October 17, 2018.

Period-Start Date	Period-End Date	High Intra-Day Price of the Reference Asset ($)	Low Intra-Day Price of the Reference Asset ($)	Period-End Closing Price of the Reference Asset ($)
1/1/2013	3/28/2013	32.50	24.73	25.58
4/1/2013	6/28/2013	29.07	22.67	24.86
7/1/2013	9/30/2013	51.59	24.15	50.24
10/1/2013	12/31/2013	58.57	43.56	54.66
1/1/2014	3/31/2014	72.58	51.85	60.24
4/1/2014	6/30/2014	67.99	54.67	67.29
7/1/2014	9/30/2014	79.69	62.22	79.04
10/1/2014	12/31/2014	82.16	70.32	78.02
1/1/2015	3/31/2015	86.06	73.45	82.22
4/1/2015	6/30/2015	89.40	76.79	85.77
7/1/2015	9/30/2015	99.24	72.00	89.90
10/1/2015	12/31/2015	110.64	88.36	104.66
1/1/2016	3/31/2016	117.59	89.38	114.10
4/1/2016	6/30/2016	121.07	106.32	114.28
7/1/2016	9/30/2016	131.97	112.97	128.27
10/1/2016	12/30/2016	133.50	113.56	115.05
1/1/2017	3/31/2017	142.94	115.51	142.05
4/1/2017	6/30/2017	156.50	138.82	150.98
7/1/2017	9/29/2017	175.45	147.80	170.87
10/1/2017	12/29/2017	184.23	168.30	176.46
1/1/2018	3/29/2018	195.31	149.02	159.79
4/1/2018	6/29/2018	203.55	150.51	194.32
7/1/2018	9/28/2018	218.62	159.00	164.46
10/1/2018	10/17/2018	165.88	149.29	159.42

PAST PERFORMANCE IS NOT INDICATIVE OF FUTURE RESULTS.

The following graph sets forth the historical performance of the Reference Asset based on the daily closing prices from January 1, 2013 through October 17, 2018. The red line represents the hypothetical Barrier Level of $127.54, which is equal to 80.00% of its closing price on October 17, 2018, rounded to two decimal places.

We obtained the information regarding the historical performance of the Reference Asset in the chart above 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 future performance, and no assurance can be given as to the closing price of the Reference Asset on any valuation date. We cannot give you assurance that the performance of the Reference Asset will not result in the loss of all or part of your investment.

Supplemental Plan of Distribution

JPMorgan Chase Bank, N.A., J.P. Morgan Securities LLC and its affiliates will act as placement agents for the Notes and will receive a fee from the Issuer that will not exceed $10.00 per $1,000 in principal amount of the Notes, but will forgo any fees for sales to certain fiduciary accounts.

We expect that delivery of the Notes will be made against payment for the Notes on or about October 23, 2018, which is the third business day following the pricing date (this settlement cycle being referred to as "T+3"). Under Rule 15c6-1 of the Securities Exchange Act of 1934, trades in the secondary market generally are required to settle in two business days, unless the parties to any such trade expressly agree otherwise. Accordingly, purchasers who wish to trade the Notes on any date prior to two business days before delivery will be required, by virtue of the fact that the Notes will settle in three business days (T+3), to specify alternative settlement arrangements to prevent a failed settlement.

In addition, RBCCM or another of its affiliates or agents may use this document in market-making transactions after the initial sale of the Notes, but is under no obligation to do so and may discontinue any market-making activities at any time without notice.

The value of the Notes shown on your account statement will 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 six months after the issue date of the Notes, the price shown on your account statement may initially be higher than RBCCM's estimated value of the Notes. This is because the estimated value of the Notes will reflect the reduction of the underwriting discount and our hedging costs and profits; however, the value of the Notes shown on your account statement during that period is expected to be a higher amount, reflecting the amortization of RBCCM's underwriting discount and our estimated profit from hedging the Notes. After this period, if RBCCM repurchases your Notes, it expects to do so at prices that reflect its estimated value.

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. This relatively lower implied borrowing rate, which is reflected in the economic terms of the Notes, along with the fees and expenses associated with structured notes, typically reduces the initial estimated value of the Notes at the time the terms of the Notes are set.

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 depend in part on the terms of these hedging arrangements.

The lower implied borrowing rate, the underwriting commission and the hedging-related costs relating to the Notes reduce the economic terms of the Notes to you and result in the initial estimated value for the Notes (estimated at the time the terms of the Notes are set) 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.

U.S. Federal Tax Consequences

The following disclosure supplements, and to the extent inconsistent supersedes, the discussion in the product prospectus supplement dated October 18, 2018 under "Supplemental Discussion of U.S. Federal Income Tax Consequences."

In the opinion of our counsel, Morrison & Foerster LLP, it would generally be reasonable to treat a Note with terms described herein as a pre-paid derivative contract in respect of the Reference Asset for U.S. federal income tax purposes, and the terms of the Notes require a holder and us (in the absence of a change in law or an administrative or judicial ruling to the contrary) to treat the Notes for all tax purposes in accordance with such characterization. However, the U.S. federal income tax consequences of your investment in the Notes are uncertain and the IRS could assert that the Notes should be taxed in a manner that is different from that described in the preceding sentence.

If the Notes are settled by physical delivery of a number of shares of the Reference Asset at maturity, although no assurances can be provided in this regard, a U.S. holder may generally expect not to recognize gain or loss upon maturity. However, a U.S. holder would generally be required to recognize loss, with respect to any cash received in lieu of a fractional share, equal to the difference between the cash received and the pro rata portion of the tax basis allocable to a fractional share. Any such loss would be treated as capital loss. A U.S. holder's tax basis in the shares of Reference Asset delivered would generally equal its tax basis in the Notes, other than any amount allocable to a fractional share. A U.S. holder's holding period for the shares of the Reference Asset delivered would begin on the day after the shares of the Reference Asset are received.

Under Section 871(m) of the Code, a "dividend equivalent" payment is treated as a dividend from sources within the United States. Such payments generally would be subject to a 30% U.S. withholding tax if paid to a non-U.S. holder. Under U.S. Treasury Department regulations, payments (including deemed payments) with respect to equity-linked instruments ("ELIs") that are "specified ELIs" may be treated as dividend equivalents if such specified ELIs reference an interest in an "underlying security," which is generally any interest in an entity taxable as a corporation for U.S. federal income tax purposes if a payment with respect to such interest could give rise to a U.S. source dividend. However, the IRS has issued guidance that states that the U.S. Treasury Department and the IRS intend to amend the effective dates of the U.S. Treasury Department regulations to provide that withholding on dividend equivalent payments will not apply to specified ELIs that are not delta-one instruments and that are issued before January 1, 2021. Based on our determination that the Notes are not delta-one instruments, non-U.S. holders should not be subject to withholding on dividend equivalent payments, if any, under the Notes. However, it is possible that the Notes could be treated as deemed reissued for U.S. federal income tax purposes upon the occurrence of certain events affecting the 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 payments are treated as dividend equivalents subject to withholding, we (or the applicable withholding agent) would be entitled to withhold taxes without being required to pay any additional amounts with respect to amounts so withheld.