ROYAL BANK OF CANADA
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Pricing Supplement No. WFC117 (to Prospectus and Prospectus Supplement each dated January 8, 2016)
Royal Bank of Canada
$2,259,000
Market Linked Securities—Leveraged Upside Participation and Fixed Percentage Buffered Downside
Principal at Risk Securities Linked to the EURO STOXX 50® Index, due January 5, 2024
The securities described in this pricing supplement are issued by Royal Bank of Canada (Royal Bank of Canada or the Issuer), and are Senior Global Medium-Term Notes, Series G of the Issuer, as described in the prospectus supplement and prospectus each dated January 8, 2016.

Agent:	Wells Fargo Securities, LLC. The agent may make sales through its affiliates or selling agents.
Principal Amount:	Each security will have a principal amount of $1,000. The securities are not principal-protected. You may lose up to 60% of the principal amount of the securities.
Pricing Date:	June 29, 2018
Original Issue Date:	July 5, 2018
Valuation Date:	December 28, 2023, subject to postponement as described below.
Maturity Date:	January 5, 2024, subject to postponement as described below.
Interest:	We will not pay you interest during the term of the securities.
Index:	The return on the securities is linked to the performance of the EURO STOXX 50® Index (Bloomberg symbol: SX5E), which we refer to as the Index.
Payment at Maturity:	The amount you receive at maturity, for each security you own, will depend upon the change in the level of the Index based on the Final Index Level relative to the Initial Index Level, and whether or not the Final Index Level is below the Buffer Level. (i) If the Final Index Level is greater than the Initial Index Level, the maturity payment amount per security will equal: $\$1,000 + (\$1,000 \times \frac{\text{Final Index Level} - \text{Initial Index Level}}{\text{Initial Index Level}} \times \text{Participation Rate})$ (ii) If the Final Index Level is equal to or less than the Initial Index Level but greater than or equal to the Buffer Level, the maturity payment amount per security will equal $1,000. (iii) If the Final Index Level is less than the Buffer Level, the maturity payment amount per security will equal: $\$1,000 - (\$1,000 \times \frac{\text{Buffer Level} - \text{Final Index Level}}{\text{Initial Index Level}})$ In such a case, you will lose up to 60% of your principal.
Participation Rate:	166%
Initial Index Level:	3,395.60, which was the closing level of the Index on the pricing date.
Final Index Level:	The closing level of the Index on the valuation date.
Buffer Level:	2,037.36, which is 60% of the Initial Index Level.
Listing:	The securities will not be listed on any securities exchange.
CUSIP Number:	78013XLK2

Our initial estimated value of the securities as of the date of this document is $918.95 per $1,000 in principal amount, which is less than the public offering price. The market value of the securities at any time will reflect many factors, cannot be predicted with accuracy, and may be less than this amount. See “Risk Factors” and “Supplemental Plan of

Distribution – Structuring the Securities" for further information.

The securities will be unsecured debt obligations of Royal Bank of Canada. Payments on the securities are subject to Royal Bank of Canada's credit risk. If Royal Bank of Canada defaults on its obligations, you could lose your entire investment. No other company or entity will be responsible for payments under the securities or liable to holders of the securities in the event Royal Bank of Canada defaults under the securities. The securities will not be issued by or guaranteed by Wells Fargo Securities, LLC or any of its affiliates.

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

For a detailed description of the terms of the securities, see "Summary Information" beginning on page PS-2 and "Specific Terms of the Securities" beginning on page PS-16. Defined terms used in this cover page are defined in "Summary Information" and "Specific Terms of the Securities."

The securities have complex features and investing in the securities involves risks. See "Risk Factors" beginning on page PS-10 of this document and page S-1 of the accompanying prospectus supplement.

	Per Security	Total
Public Offering Price	$1,000.00	$2,259,000
Underwriting Discount and Commission (1)	$46.10	$104,139.90
Proceeds to Royal Bank of Canada	$953.90	$2,154,860.10

(1) The agent will receive an underwriting discount and commission of $46.10 per security. Of that underwriting discount and commission, each dealer that sells securities will receive a selling concession of $25.00 for each security that such dealer sells. Such securities dealers may include Wells Fargo Advisors ("WFA") (the trade name of the retail brokerage business of Wells Fargo Clearing Services, LLC and Wells Fargo Advisors Financial Network, LLC). In addition to the selling concession allowed to WFA, the agent will pay $1.20 per security of the underwriting discount and commission to WFA as a distribution expense fee for each security sold by WFA. See "Use of Proceeds and Hedging" and "Supplemental Plan of Distribution" in this pricing supplement for information regarding how we may hedge our obligations under the securities.

None of the Securities and Exchange Commission, any state securities commission or any other regulatory body has approved or disapproved of the securities or passed upon the adequacy or accuracy of this pricing supplement. Any representation to the contrary is a criminal offense.

Wells Fargo Securities

The date of this pricing supplement is June 29, 2018

SUMMARY INFORMATION

This document is a pricing supplement. This pricing supplement provides specific pricing information in connection with this issuance of securities. This summary includes questions and answers that highlight selected information from this pricing supplement and the accompanying prospectus supplement and prospectus to help you understand the Market Linked Securities Leveraged Upside Participation and Fixed Percentage Buffered Downside Principal at Risk Securities Linked to the EURO STOXX 50® Index, due January 5, 2024 (the securities). You should carefully read this pricing supplement and the accompanying prospectus supplement and prospectus to fully understand the terms of the securities and the tax and other considerations relating to the securities. You should carefully review the section "Risk Factors" in this pricing supplement and the accompanying prospectus supplement and prospectus, which highlight certain risks associated with an investment in the securities, to determine whether an investment in the securities is appropriate for you.

Unless otherwise mentioned or unless the context requires otherwise, all references in this pricing supplement to "Royal Bank of Canada", "we", "us" and "our" or similar references mean Royal Bank of Canada. Capitalized terms used in this pricing supplement without definition have the meanings given to them in the accompanying prospectus supplement and prospectus.

What are the securities?

The securities offered by this pricing supplement will be issued by Royal Bank of Canada and will mature on January 5, 2024. The return on the securities, if any, will be linked to the performance of the EURO STOXX 50® Index, which we refer to as the Index. The securities will not bear interest and no other payments will be made until maturity. You may lose up to 60% of your investment in the securities.

As discussed in the accompanying prospectus supplement, the securities are debt securities and are part of a series of debt securities entitled "Senior Global Medium-Term Notes, Series G" that Royal Bank of Canada may issue from time to time. The securities will rank equally with all other unsecured and unsubordinated debt of Royal Bank of Canada. For more details, see "Specific Terms of the Securities" beginning on page PS-16.

Each security will have a principal amount of $1,000. Each security will be offered at an initial public offering price of $1,000. However, on the pricing date, our initial estimated value of the securities is less than $1,000 per security as a result of certain costs that are included in the initial public offering price. See "Risk Factors—Our initial estimated value of the securities is less than the initial public offering price" and "Supplemental Plan of Distribution—Structuring the Securities." To the extent a market for the securities exists, you may transfer only whole securities. Royal Bank of Canada will issue the securities in the form of a master global certificate, which is held by The Depository Trust Company, also known as DTC, or its nominee. Direct and indirect participants in DTC will record your ownership of the securities.

Are the securities principal protected?

No, the securities do not guarantee any return of principal at maturity. If the Final Index Level is less than the Buffer Level, you will be exposed on a 1-to-1 basis to declines in the level of the Index beyond the Buffer Level. Accordingly, if the Final Index Level is below the Buffer Level, you will lose up to 60% of your principal.

What will I receive upon maturity of the securities?

At maturity, for each security you own, you will receive a cash payment equal to the maturity payment amount. The maturity payment amount to which you will be entitled depends on the percentage change in the level of the Index calculated based on the Final Index Level (as defined below) relative to the Initial Index Level (as defined below), and whether or not the Final Index Level is below the Buffer Level (as defined below).

The maturity payment amount for each security will be determined by the calculation agent as described below:

- If the Final Index Level is greater than the Initial Index Level, the maturity payment amount per security will equal:

$$\$1{,}000 + \left(\$1{,}000 \times \frac{\text{Final Index Level} - \text{Initial Index Level}}{\text{Initial Index Level}} \times \text{Participation Rate}\right)$$

The Participation Rate is 166%.

- If the Final Index Level is equal to or less than the Initial Index Level, but greater than or equal to the Buffer Level, the maturity payment amount per security will equal $1,000.
- If the Final Index Level is less than the Buffer Level, the maturity payment amount per security will equal:

$$\$1{,}000 - \left(\$1{,}000 \times \frac{\text{Buffer Level} - \text{Final Index Level}}{\text{Initial Index Level}}\right)$$

If the Final Index Level is less than the Buffer Level, the amount you will receive at maturity will be less than the principal amount of the securities, and you will lose up to 60% of your principal. If the Final Index Level is zero, the maturity payment amount will be $400.00 per security, and you will lose 60% of your principal.

The Initial Index Level is 3,395.60, which was the closing level of the Index on the pricing date.

The Buffer Level is 2,037.36, which is 60% of the Initial Index Level.

The Final Index Level will be determined by the calculation agent and will be the closing level of the Index on the valuation date.

The valuation date is December 28, 2023. However, if that day occurs on a day that is not a trading day (as defined on page PS-20) or on a day on which the calculation agent has determined that a market disruption event (as defined under “Specific Terms of the Securities—Market Disruption Event” below) has occurred or is continuing, then the valuation date will be postponed until the next succeeding trading day on which the calculation agent determines that a market disruption event does not occur or is not continuing; provided that in no event will the valuation date be postponed by more than five trading days. If the valuation date is postponed, then the maturity date of the securities will be postponed by an equal number of business days. The maturity date will be a business day. In the event the maturity date would otherwise be a date that is not a business day, the maturity date will be postponed to the next succeeding date that is a business day and no interest shall accrue or be payable as a result of the postponement.

The closing level on any trading day will equal the official closing level of the Index or any successor Index (as defined under “Specific Terms of the Securities—Discontinuation of the Index; Adjustments to the Index” below) published by the Index Sponsor (as defined below) or any successor index sponsor at the regular weekday close of trading on that trading day. In certain circumstances, the closing level will be based on the alternate calculation of the Index described under “Specific Terms of the Securities—Discontinuation of the Index; Adjustments to the Index” below.

If the Final Index Level is less than the Buffer Level, you will you will be exposed on a 1-to-1 basis to declines in the level of the Index beyond the Buffer Level. Accordingly, if the level of the Index decreases below the Buffer Level, you will lose up to 60% of your principal.

Hypothetical Examples

Set forth below are four hypothetical examples of the calculation of the maturity payment amount based on the following hypothetical values (the numbers appearing in the examples below have been rounded for ease of analysis):

Hypothetical Initial Index Level: 3,000.00

Hypothetical Buffer Level: 1,800.00

Participation Rate: 166%

Example 1—The hypothetical Final Index Level is 40.00% of the hypothetical Initial Index Level, which is below the Buffer Level:

Hypothetical Final Index Level: 1,200.00

Maturity payment amount (per security) $= \$1{,}000 - \left(\$1{,}000 \times \dfrac{1{,}800.00 - 1{,}200.00}{3{,}000.00}\right) = \$800.00$

Since the hypothetical Final Index Level is less than the hypothetical Initial Index Level and below the hypothetical Buffer Level, the amount you will receive at maturity will be equal to the issue price of $1,000 per security minus $1,000 times the difference between the hypothetical Buffer Level and the hypothetical Final Index Level, divided by the hypothetical Initial Index Level, and you would lose some of your principal. Although the hypothetical Final Index level declined by 60.00% from the hypothetical Initial Index Level to the hypothetical Final Index Level, your total cash payment at maturity would be $800.00 per security, representing a 20.00% loss of the principal amount of your securities.

Example 2—The hypothetical Final Index Level is 95.00% of the hypothetical Initial Index Level, which is below the Initial Index Level, but above the Buffer Level:

Since the hypothetical Final Index Level is less than the hypothetical Initial Index Level but greater than the hypothetical Buffer Level, the maturity payment amount per security will equal the principal amount of $1,000.

Example 3—The hypothetical Final Index Level is 120.00% of the hypothetical Initial Index Level:

Hypothetical Final Index Level: 3,600.00

Maturity payment amount (per security) $= \$1{,}000 + \left(\$1{,}000 \times \dfrac{3{,}600.00 - 3{,}000.00}{3{,}000.00} \times 166\%\right)$

$= \$1{,}000 + \$332.00 = \$1{,}332.00$

Since the hypothetical Final Index Level is greater than the hypothetical Initial Index Level, you would receive the principal amount of $1,000 plus 166% times the amount of the percentage change in the level of the Index times $1,000. Your total cash payment at maturity would be $1,332.00 per security, representing a 33.20% total return.

Hypothetical Returns

The following table is based on the Participation of 166%, and assumes a hypothetical Initial Index Level of 3,000.00 and a range of hypothetical Final Index Levels and illustrates:

- the percentage change from the hypothetical Initial Index Level to the hypothetical Final Index Level;
- the hypothetical maturity payment amount per security; and
- the hypothetical pre-tax total rate of return to beneficial owners of the securities.

The figures below are rounded for ease of analysis and are for purposes of illustration only. The actual maturity payment amount will depend on the actual Final Index Level as determined by the calculation agent as described in this pricing supplement.

Hypothetical Final Index Level		Percentage Change from the Hypothetical Initial Index Level to the Hypothetical Final Index Level	Hypothetical Maturity Payment Amount per Security	Hypothetical Pre-Tax Total Rate of Return on the Securities
0.00		-100.00%	$400.00	-60.00%
300.00		-90.00%	$500.00	-50.00%
600.00		-80.00%	$600.00	-40.00%
900.00		-70.00%	$700.00	-30.00%
1,200.00		-60.00%	$800.00	-20.00%
1,350.00		-55.00%	$850.00	-15.00%
1,500.00		-50.00%	$900.00	-10.00%
1,650.00		-45.00%	$950.00	-5.00%
1,800.00	(1)	-40.00%	$1,000.00	0.00%
2,100.00		-30.00%	$1,000.00	0.00%
2,400.00		-20.00%	$1,000.00	0.00%
2,700.00		-10.00%	$1,000.00	0.00%
3,000.00	(2)	0.00%	$1,000.00	0.00%
3,300.00		10.00%	$1,166.00	16.60%
3,600.00		20.00%	$1,332.00	33.20%
3,900.00		30.00%	$1,498.00	49.80%
4,200.00		40.00%	$1,664.00	66.40%
4,500.00		50.00%	$1,830.00	83.00%
4,800.00		60.00%	$1,996.00	99.60%
5,100.00		70.00%	$2,162.00	116.20%
5,400.00		80.00%	$2,328.00	132.80%
5,700.00		90.00%	$2,494.00	149.40%
6,000.00		100.00%	$2,660.00	166.00%

(1) This is the hypothetical Buffer Level.
(2) This is the hypothetical Initial Index Level.

The following graph sets forth the return at maturity for a range of hypothetical percentage changes of the Index, based on the Participation Rate of 166%.

Return Profile of Market Linked Securities —Leveraged Upside Participation
and Fixed Percentage Buffered Downside Principal at Risk Securities vs. the Index

Who should or should not consider an investment in the securities?

We have designed the securities for investors who seek exposure to the Index, who believe that the Index level will increase over the term of the securities, and who want to participate in 1.66 times the possible appreciation of the Index (measured by the percentage change in the level of the Index based on the Final Index Level relative to the Initial Index Level); who understand that, if the Final Index Level is less than the Buffer Level, they will lose money on their investment; and who are willing to hold their securities until maturity. Investors in the securities should be willing to risk up to 60% of their investment.

The securities are not designed for, and may not be a suitable investment for, investors who are unable or unwilling to hold the securities to maturity, who seek principal protection for their investment, who are unwilling to make an investment exposed to downside performance risk of the Index or who are unwilling to purchase securities with an initial estimated value as of the pricing date that is lower than the initial public offering price. The securities may not be a suitable investment for investors who prefer the lower risk of fixed income investments with comparable maturities issued by companies with comparable credit ratings.

What will I receive if I sell the securities prior to maturity?

The market value of the securities may fluctuate during the term of the securities. Several factors and their interrelationship will influence the market value of the securities, including the level of the Index, dividend yields of the common stocks underlying the Index, the time remaining to maturity of the securities, interest rates and the volatility of the Index. Depending on the impact of these factors, you may receive less than $1,000 per security from any sale of your securities before the maturity date of the securities and less than what you would have received had you held the securities until maturity. Assuming no change in market conditions or other relevant factors, the price, if any, at which you may be able to sell your securities prior to maturity will be less than the initial public offering price and, subject to the discussion regarding secondary market prices during the six months following the original issue date in “Supplemental Plan of Distribution” on page PS-32, will be less than the initial estimated value of the securities set forth on the cover page. For more details, see “Risk Factors — Many factors affect the market value of the securities” on page PS-11 and “—The price, if any, at which you may be able to sell your securities prior to maturity may be less than the initial public offering price and our initial estimated value" on page PS-13.

Who publishes the Index and what does the Index measure?

The EURO STOXX 50® Index (the Index) is an equity index that is composed of 50 component stocks of sector leaders in 11 Eurozone countries and is intended to provide an indication of common stock price movement in the Eurozone. The Index is published by STOXX Limited (the Index Sponsor).

The Index is determined, calculated and maintained by the Index Sponsor without regard to the securities.

You should be aware that an investment in the securities does not entitle you to any ownership interest in the common stocks of the companies included in the Index. For a discussion of the Index, see "EURO STOXX 50® Index" below.

How has the Index performed historically?

You can find a table with the high, low and period-end closing levels of the Index during each calendar quarter from the first quarter of 2008 to the present, in the section entitled "EURO STOXX 50® Index— Historical Closing Levels of the Index" in this pricing supplement. We obtained the historical information from Bloomberg Financial Markets without independent verification. You should not take the past performance of the Index as an indication of how the Index will perform in the future.

What are the United States federal income tax consequences of investing in the securities?

The terms of the securities require a holder and us (in the absence of a change in law or an administrative or judicial ruling to the contrary) to treat the securities for all tax purposes as pre-paid cash-settled derivative contracts in respect of the Index. If the securities are so treated, a U.S. holder should generally recognize capital gain or loss upon the sale, exchange or maturity of the securities in an amount equal to the difference between the amount a holder receives at such time and the holder's tax basis in the securities.

Please read carefully the section entitled "Supplemental Discussion of U.S. Federal Income Tax Consequences" in this pricing supplement, the section entitled "Tax Consequences" in the accompanying prospectus and the section entitled "Certain Income Tax Consequences" in the accompanying prospectus supplement. You should consult your tax advisor about your own tax situation.

What are the Canadian federal income tax consequences of investing in the securities?

For a discussion of the Canadian federal income tax consequences of investing in the securities, please read carefully the section entitled "Tax Consequences" in the accompanying prospectus and the section entitled "Certain Income Tax Consequences" in the accompanying prospectus supplement. You should consult your tax advisor about your own tax situation.

Will the securities be listed on a stock exchange?

The securities will not be listed on any securities exchange. There can be no assurance that a liquid trading market will develop for the securities. Accordingly, if you sell your securities prior to maturity, you may have to sell them at a substantial loss. You should review the section entitled "Risk Factors—There may not be an active trading market for the securities" in this pricing supplement.

Are there any risks associated with my investment?

Yes, an investment in the securities is subject to significant risks, including the risk of loss of up to 60% of your principal. We urge you to read the detailed explanation of risks in "Risk Factors" beginning on page PS-10 of this document and page S-1 of the accompanying prospectus supplement.

ADDITIONAL INFORMATION

You should read this pricing supplement together with the prospectus dated January 8, 2016, as supplemented by the prospectus supplement dated January 8, 2016, relating to our Senior Global Medium-Term Notes, Series G, of which these securities are a part. This pricing supplement, together with these documents, contains the terms of the securities and supersedes all other prior or contemporaneous oral statements as well as any other written materials including preliminary or indicative pricing terms, correspondence, trade ideas, structures for implementation, sample structures, brochures or other educational materials of ours.

You should rely only on the information provided or incorporated by reference in this pricing supplement, the prospectus and the prospectus supplement. We have not authorized anyone else to provide you with different information, and we take no responsibility for any other information that others may give you. We and Wells Fargo Securities, LLC are offering to sell the securities and seeking offers to buy the securities only in jurisdictions where it is lawful to do so. The information contained in this pricing supplement and the accompanying prospectus supplement and prospectus is current only as of their respective dates.

If the information in this pricing supplement differs from the information contained in the prospectus supplement or the prospectus, you should rely on the information in this pricing supplement.

You should carefully consider, among other things, the matters set forth in “Risk Factors” in this pricing supplement and the accompanying prospectus supplement, as the securities involve risks not associated with conventional debt securities. We urge you to consult your investment, legal, tax, accounting and other advisers before you invest in the securities.

You may access these documents on the SEC website at www.sec.gov as follows (or if such 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

Our Central Index Key, or CIK, on the SEC website is 1000275.

Please see the section “Documents Incorporated by Reference” on page i of the above prospectus for a description of our filings with the SEC that are incorporated by reference therein.

RISK FACTORS

An investment in the securities is subject to the risks described below, as well as the risks described under "Risk Factors" in the accompanying prospectus supplement and prospectus. The securities have complex features and are a riskier investment than ordinary debt securities. Also, your securities are not equivalent to investing directly in the Index or the common stocks included in the Index. Investors in the securities are also exposed to further risks related to the Issuer of the securities, Royal Bank of Canada, which are described in Royal Bank of Canada's most recent annual report on Form 40-F filed with the SEC and incorporated by reference herein. See the categories of risks identified and disclosed in the management's discussion and analysis of financial condition and results of operations included in the annual report on Form 40-F. This section (and the management's discussion and analysis section of the annual report on Form 40-F) describes the most significant risks relating to the securities. You should carefully consider whether the securities are suited to your particular circumstances.

Your investment may result in a loss of up to 60% of your principal

We will not repay you a fixed amount of principal on the securities at maturity. The payment at maturity on the securities will depend on the percentage change in the level of the Index based on the Final Index Level relative to the Initial Index Level, and whether or not the Final Index Level is below the Buffer Level. Because the level of the Index is subject to market fluctuations, the amount of cash you receive at maturity may be more or less than the principal amount of the securities. If the Final Index Level is less than the Buffer Level, you will be exposed on a 1-to-1 basis to declines in the level of the Index beyond the Buffer Level. Accordingly, if the level of the Index decreases below the Buffer Level, you will lose up to 60% of your principal.

You will not receive interest payments on the securities

You will not receive any periodic interest payments on the securities or any interest payment at maturity. Your payment at maturity will depend on the percentage change in the level of the Index based on the Final Index Level relative to the Initial Index Level, and whether or not the Final Index Level falls below the Buffer Level.

Your yield may be lower than the yield on a standard debt security of comparable maturity

The yield that you will receive on your securities, which could be negative, may be less than the return you could earn on other investments. Even if your yield is positive, your yield may be less than the yield you would earn if you bought a standard senior non-callable debt security of Royal Bank of Canada with the same maturity date. Your investment may not reflect the full opportunity cost to you when you take into account factors that affect the time value of money. Unlike conventional senior non-callable debt securities, the securities do not guarantee the return of all of the principal amount at maturity. In addition, no interest will be paid during the term of your securities.

Owning the securities is not the same as owning the common stocks underlying the Index

The return on your securities will not reflect the return you would realize if you actually owned and held the common stocks underlying the Index for a similar period. First, because the maturity payment amount will be determined based on the performance of the Index, which is a price-return index, the return on the securities will not take into account the value of any dividends that may be paid on the common stocks underlying the Index. Second, as a holder of the securities, you will not be entitled to receive any dividend payments or other distributions on the common stocks underlying the Index, nor will you have voting rights or any other rights that holders of those common stocks may have. Even if the level of the Index increases above the Initial Index Level during the term of the securities, the market value of the securities may not increase by the same amount. It is also possible for the level of the Index to increase while the market value of the securities declines.

There may not be an active trading market for the securities

The securities will not be listed on any securities exchange. There can be no assurance that a liquid trading market will develop for the securities. Even if a secondary market for the securities develops, it may not provide significant liquidity and transaction costs in any secondary market could be high. As a result, the difference between bid and asked prices for the securities in any secondary market could be substantial. If you sell your securities before maturity, you may have to do so at a discount from the initial public offering price, and, as a result, you may suffer substantial losses.

Wells Fargo Securities, LLC and its broker-dealer affiliates may make a market for the securities, although they are not required to do so. As market makers, trading of the securities may cause Wells Fargo Securities, LLC or its broker-dealer affiliates to have long or short positions in the securities. Because we do not expect that any other market makers will participate in a secondary market for the securities, the price at which you may be able to sell your securities is likely to depend on the price, if any, at which Wells Fargo Securities, LLC or its broker-dealer affiliates may be willing to buy your securities. See "Supplemental Plan of Distribution."

The amount to be paid at maturity is not linked to the level of the Index at any time other than the valuation date

The payment at maturity will be based on the level of the Index only on the valuation date. Therefore, for example, if the closing level of the Index decreased precipitously on the valuation date, the payment on the securities may be significantly less than it would otherwise have been had the payment been linked to the closing level of the Index prior to that decrease. Although the actual level of the Index on the maturity date or at other times during the term of the securities may be higher than the Index level on the valuation date, you will not benefit from the closing level of the Index at any time other than the valuation date.

Many factors affect the market value of the securities

The market value of the securities will be affected by factors that interrelate in complex ways. It is important for you to understand that the effect of one factor may offset any increase in the market value of the securities caused by another factor and that the effect of one factor may compound any decrease in the market value of the securities caused by another factor. For example, a change in the volatility of the Index may offset some or all of any increase in the market value of the securities attributable to another factor, such as an increase in the level of the Index. In addition, a change in interest rates may offset other factors that would otherwise change the level of the Index, and therefore, may change the market value of the securities. We expect that the market value of the securities will depend to a significant extent on the amount, if any, by which the Index level during the term of the securities exceeds or does not exceed the Initial Index Level. If you choose to sell your securities when the level of the Index exceeds the Initial Index Level, you may receive substantially less than the amount that would be payable at maturity based on this level because of the expectation that the Index will continue to fluctuate until the valuation date. We believe that other factors that may also influence the value of the securities include:

- the volatility (frequency and magnitude of changes in the level) of the Index and, in particular, market expectations regarding the volatility of the Index;
- market interest rates in the U.S.;
- the dividend yields of the common stocks included in the Index;
- our creditworthiness, as perceived in the market;
- changes that affect the Index, such as additions, deletions or substitutions;
- the time remaining to maturity; and
- geopolitical, economic, financial, political, regulatory or judicial events as well as other conditions may affect the common stocks included in the Index.

The securities will be debt obligations of Royal Bank of Canada. No other company or entity will be responsible for payments under the securities

The securities will be issued by Royal Bank of Canada. The securities will not be guaranteed by any other company or entity. No other entity or company will be responsible for payments under the securities or liable to holders of the securities in the event Royal Bank of Canada defaults under the securities. Royal Bank of Canada's credit ratings are an assessment of our ability to pay our obligations, including those on the securities. Consequently, if we default on our obligations, you could lose your entire investment, and actual or anticipated declines in our creditworthiness may affect the value of the securities. The securities will not be issued by or guaranteed by Wells Fargo Securities, LLC or any of its affiliates.

Changes that affect the Index will affect the market value of the securities and the maturity payment amount

The policies of the Index Sponsor concerning the calculation of the Index, additions, deletions or substitutions of the common stocks underlying the Index and the manner in which changes affecting the issuers of those stocks, such as stock dividends, reorganizations or mergers, are reflected in the Index could affect the level of the Index, the maturity payment amount, and the market value of the securities prior to maturity. The amount payable on the securities and their market value could also be affected if the Index Sponsor changes these policies, for example, by changing the manner in which it calculates the Index, or if the Index Sponsor discontinues or suspends calculation or publication of the Index, in which case it may become difficult to determine the market value of the securities. If events such as these occur, or if the level of the Index is not available on the valuation date because of a market disruption event or for any other reason and no successor index is selected, the calculation agent may determine the level of the Index — and thus the maturity payment amount — in its sole discretion.

We have no affiliation with the Index Sponsor and will not be responsible for any actions taken by the Index Sponsor

We have no affiliation with the Index Sponsor and the Index Sponsor will not be involved in the offering of the securities. Consequently, we have no control of the actions of the Index Sponsor, including any actions of the type that would affect the composition of the Index, and therefore, the level of the Index. The Index Sponsor has no obligation of any sort with respect to the securities. Thus, the Index Sponsor has no obligation to take your interests into consideration for any reason, including in taking any actions that might affect the value of the securities.

Historical levels of the Index should not be taken as an indication of the future levels of the Index during the term of the securities

The trading prices of the common stocks underlying the Index will determine the Index level at any given time. As a result, it is impossible to predict whether the level of the Index will rise or fall. Trading prices of the common stocks underlying the Index will be influenced by complex and interrelated political, economic, financial and other factors that can affect the issuers of those stocks.

Hedging transactions may affect the return on the securities

As described below under “Use of Proceeds and Hedging” on page PS-30, we, through one or more hedging counterparties, may hedge our obligations under the securities by purchasing common stocks underlying the Index, futures or options on the Index or common stocks underlying the Index, or exchange-traded funds or other derivative instruments with returns linked or related to changes in the level of the Index or trading prices of common stocks underlying the Index, and may adjust these hedges by, among other things, purchasing or selling any of these assets at any time. Although they are not expected to, any of these hedging activities may adversely affect the trading prices of common stocks underlying the Index and/or the level of the Index and, therefore, the market value of the securities. It is possible that we or one or more of our hedging counterparties could receive substantial returns from these hedging activities while the market value of the securities declines.

Our initial estimated value of the securities is less than the initial public offering price

Our initial estimated value of the securities is less than the initial public offering price of the securities. This is due to, among other things, the fact that the initial public offering price of the securities reflects the borrowing rate we pay to issue securities of this kind (an internal funding rate that is lower than the rate at which we borrow funds by issuing conventional fixed rate debt), and the inclusion in the initial public offering price of the underwriting discount and commission and hedging and other costs associated with the securities.

The price, if any, at which you may be able to sell your securities prior to maturity may be less than the initial public offering price and our initial estimated value

Assuming no change in market conditions or any other relevant factors, the price, if any, at which you may be able to sell your securities prior to maturity will be less than the initial public offering price and, subject to the discussion in the next paragraph, will be less than our initial estimated value. This is because any such sale price would not be expected to include the underwriting discount and commission or hedging or other costs associated with the secu