

UBS AG  
 Form 424B2  
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Registration Statement No. 333-225551

FINAL TERMS SUPPLEMENT

(To Prospectus dated October 31, 2018, Product Supplement dated October 31, 2018 and Prospectus Supplement dated November 1, 2018)

**Final Terms Supplement**

**UBS AG Trigger Phoenix Autocallable Optimization Securities**

UBS AG \$425,000.00 Securities Linked to the common stock of Apple Inc. due on November 25, 2020

**Final Terms**

**Issuer** UBS AG, London Branch

**Principal Amount** \$10.00 per security. The Securities are offered at a minimum investment of 100 Securities at \$10.00 per Security (representing a \$1,000 investment) and integral multiples of \$10.00 in excess thereof.

**Term** Approximately 24 months, unless called earlier.

**Underlying Asset** The common stock of Apple Inc.  
 If the closing price of the underlying asset is equal to or greater than the coupon barrier on any observation date, UBS will pay you the contingent coupon applicable to such observation date.

**Contingent Coupon** If the closing price of the underlying asset is less than the coupon barrier on any observation date, the contingent coupon applicable to such observation date will not be payable and UBS will not make any payment to you on the relevant coupon payment date.

The contingent coupon will be a fixed amount based upon equal quarterly installments at the per annum contingent coupon rate. Contingent coupons are not guaranteed and UBS will not pay you the contingent coupon for any observation date on which the closing price of the underlying asset is less than the coupon barrier. The table below reflects the contingent coupon rate of 12.75% per annum. Amounts in the table below may have been rounded for ease of analysis.

Observation Date*	Contingent Coupon (per security)
20-Feb-2019	\$0.3188

20-May-2019	\$0.3188
20-Aug-2019	\$0.3188
20-Nov-2019	\$0.3188
20-Feb-2020	\$0.3188
20-May-2020	\$0.3188
20-Aug-2020	\$0.3188
20-Nov-2020	\$0.3188

\*Observation dates are subject to the market disruption event provisions set forth in the accompanying product supplement.

Contingent Coupon Rate

12.75% per annum (or approximately 3.188% per outstanding quarter).

Automatic Call Feature

The Securities will be called automatically if the closing price of the underlying asset on any observation date is equal to or greater than the initial price. If the Securities are called on any observation date, UBS will pay you on the corresponding coupon payment date a cash payment per Security equal to your principal amount plus the contingent coupon otherwise due on such date pursuant to the contingent coupon feature. No further amounts will be owed to you under the Securities.

If the Securities are not called and the final price is equal to or greater than the trigger price and coupon barrier, UBS will pay you a cash payment per Security on the maturity date equal to your principal plus the contingent coupon otherwise due on the maturity date.

Payment at Maturity (per Security)

If the Securities are not called and the final price is less than the trigger price, UBS will pay you a cash payment on the maturity date of significantly less than the principal amount, if anything, resulting in a loss of principal that is proportionate to the decline of the underlying asset, for an amount equal to  $\$10 + (\$10 \times \text{underlying return})$ .

$$\frac{\text{Final Price} - \text{Initial Price}}{\text{Initial Price}}$$

Underlying Return

Initial Price

Closing Price

On any trading day, the last reported sale price (or, in the case of NASDAQ, the official closing price) of the underlying asset during the principal trading session on the principal national securities exchange on which it is listed for trading, as determined by the calculation agent.

Initial Price

\$176.98, which is the closing price of the underlying asset on the trade date, as determined by the calculation agent and as may be adjusted in the case of certain corporate events, as described in the accompanying product supplement.

Trigger Price/Coupon Barrier	\$132.74, which is 75.00% of the initial price of the underlying asset, as determined by the calculation agent and as may be adjusted in the case of certain corporate events, as described in the accompanying product supplement.
Final Price	The closing price of the underlying asset on the final valuation date, as determined by the calculation agent and subject to adjustments in the case of certain corporate events, as described in the accompanying product supplement.
Trade Date	November 20, 2018
Settlement Date	November 23, 2018
Final Valuation Date	November 20, 2020 (subject to postponement in the event of a market disruption event, as described in the accompanying product supplement)
Maturity Date	November 25, 2020 (subject to postponement in the event of a market disruption event, as described in the accompanying product supplement)
Coupon Payment Dates	Three business days following each observation date, except the coupon payment date for the final valuation date will be the maturity date.
CUSIP	90286K762
ISIN	US90286K7625
Valoren	44511728

The estimated initial value of the Securities as of the trade date is \$9.67 for Securities linked to the underlying asset. The estimated initial value of the Securities was determined as of the close of the relevant markets on the date of this final terms supplement by reference to UBS' internal pricing models, inclusive of the internal funding rate. For more information about secondary market offers and the estimated initial value of the Securities, see "Key Risks - Fair value considerations" and "Key Risks - Limited or no secondary market and secondary market price considerations" in this final terms supplement.

**Notice to investors: the Securities are significantly riskier than conventional debt instruments. The issuer is not necessarily obligated to repay the full principal amount of the Securities at maturity, and the Securities may have the same downside market risk as the underlying asset. This market risk is in addition to the credit risk inherent in purchasing a debt obligation of UBS. You should not purchase the Securities if you do not understand or are not comfortable with the significant risks involved in investing in the Securities.**

**You should carefully consider the risks described under "Key Risks" in this final terms supplement, under "Key Risks" beginning on page 3 of the prospectus supplement and under "Risk Factors" beginning on page PS-9 of the accompanying product supplement before purchasing any Securities. Events relating to any of those risks, or other risks and uncertainties, could adversely affect the market value of, and the return on, your Securities. You may lose a significant portion or all of your initial investment in the Securities. The Securities will not be listed or displayed on any securities exchange or any electronic communications network.**

**Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these Securities or passed upon the adequacy or accuracy of this final terms supplement, the previously delivered prospectus supplement, the accompanying product supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.**

The Securities are not bank deposits and are not insured by the Federal Deposit Insurance Corporation or any other governmental agency.

**See "Additional Information about UBS and the Securities" in this final terms supplement. The Securities we are offering will have the terms set forth in the Prospectus Supplement dated November 1, 2018 relating to the Securities, the accompanying product supplement, the accompanying prospectus and this final terms supplement.**

Offering of Securities	Issue Price to Public		Underwriting Discount		Proceeds to UBS AG	
	Total	Per Security	Total	Per Security	Total	Per Security
Securities linked to the common stock of Apple Inc.	\$425,000.00	\$10.00	\$6,375.00	\$0.15	\$418,625.00	\$9.85

**UBS Financial Services Inc.****UBS Investment Bank**

Final Terms Supplement dated November 20, 2018

**Additional Information About UBS and the Securities**

UBS has filed a registration statement (including a prospectus, as supplemented by a product supplement and a prospectus supplement for the Securities) with the Securities and Exchange Commission, or SEC, for the offering for which this final terms supplement relates. Before you invest, you should read these documents and any other documents relating to the Securities that UBS has filed with the SEC for more complete information about UBS and this offering. You may obtain these documents for free from the SEC website at [www.sec.gov](http://www.sec.gov). Our Central Index Key, or CIK, on the SEC website is 0001114446.

**You may access these documents on the SEC website at [www.sec.gov](http://www.sec.gov) as follows:**

- Prospectus supplement dated November 1, 2018:  
<http://www.sec.gov/Archives/edgar/data/1114446/000091412118002132/ub46175276-424b2.htm>
- Market-Linked Securities product supplement dated October 31, 2018:  
<http://www.sec.gov/Archives/edgar/data/1114446/000091412118002085/ub47016353-424b2.htm>
- Prospectus dated October 31, 2018:  
<http://www.sec.gov/Archives/edgar/data/1114446/000119312518314003/d612032d424b3.htm>

*References to “UBS,” “we,” “our” and “us” refer only to UBS AG and not to its consolidated subsidiaries. In this document, “Trigger Phoenix Autocallable Optimization Securities” or the “Securities” refer to the Securities that are offered hereby. Also, references to the “prospectus supplement” mean the UBS prospectus supplement, dated November 1, 2018, references to “Market-Linked Securities product supplement” mean the UBS product supplement, dated October 31, 2018, relating to the Securities generally, and references to the “accompanying prospectus” mean the UBS prospectus titled “Debt Securities and Warrants”, dated October 31, 2018.*

This final terms supplement, together with the documents listed above, contains the terms of the Securities and supersedes all other prior or contemporaneous oral statements as well as any other written materials including 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 “Key Risks” and in “Risk Factors” in the accompanying product supplement, as the Securities involve risks not associated with conventional debt

securities. We urge you to consult your investment, legal, tax, accounting and other advisors before deciding to invest in the Securities.

UBS reserves the right to change the terms of, or reject any offer to purchase, the Securities prior to their issuance. In the event of any changes to the terms of the Securities, UBS 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 UBS may reject your offer to purchase.

## Key Risks

An investment in the Securities involves significant risks. Some of the risks that apply to the Securities are summarized here and are comparable to the corresponding risks discussed in the "Key Risks" section of the prospectus supplement, but we urge you to read the more detailed explanation of risks relating to the Securities generally in "Risk Factors" section of the accompanying product supplement. We also urge you to consult your investment, legal, tax, accounting and other advisors before you invest in the Securities.

- **Risk of loss at maturity** - The Securities differ from ordinary debt securities in that UBS will not necessarily pay the full principal amount of the Securities at maturity. If the Securities are not called, UBS will repay you the principal amount of your Securities in cash only if the final price of the underlying asset is equal to or greater than the trigger price and will only make such payment at maturity. If the Securities are not called and the final price is less than the trigger price, you will be fully exposed to the negative underlying return and lose a significant portion or all of your initial investment in an amount proportionate to the decline in the price of the underlying asset.
- **The contingent repayment of your principal applies only at maturity** - You should be willing to hold your Securities to maturity. If you are able to sell your Securities prior to maturity in the secondary market, you may have to sell them at a loss relative to your initial investment even if the then-current underlying asset price is equal to or greater than the trigger price at that time.
- **You may not receive any contingent coupons** - UBS will not necessarily pay periodic contingent coupons on the Securities. If the closing price of the underlying asset on an observation date is less than the coupon barrier, UBS will not pay you the contingent coupon applicable to such observation date. If the closing price of the underlying asset is less than the coupon barrier on each of the observation dates, UBS will not pay you any contingent coupons during the term of, and you will not receive a positive return on, your Securities. Generally, this non-payment of the contingent coupon coincides with a period of greater risk of principal loss on your Securities.
- **Your potential return on the Securities is limited and you will not participate in any appreciation of the underlying asset** - The return potential of the Securities is limited to the contingent coupon rate, regardless of the appreciation of the underlying asset. In addition, the total return on the

Securities will vary based on the number of observation dates on which the requirements of the contingent coupon have been met prior to maturity or an automatic call. Further, if the Securities are called due to the automatic call feature, you will not receive any contingent coupons or any other payment in respect of any observation dates after the applicable call settlement date. Since the Securities could be called as early as the first observation date, the total return on the Securities could be minimal. If the Securities are not called, you will not participate in any appreciation in the price of the underlying asset even though you will be subject to the underlying asset's risk of decline. As a result, the return on an investment in the Securities could be less than the return on a direct investment in the underlying asset.

**Higher contingent coupon rates are generally associated with a greater risk of loss** - Greater expected volatility with respect to the underlying asset reflects a higher expectation as of the trade date that the price of such underlying asset could close below its trigger price on the final valuation date of the Securities. This greater expected risk will generally be reflected in a higher contingent coupon rate for that Security. However, an underlying asset's volatility can change significantly over the term of the Securities and the price of the underlying asset for your Securities could fall sharply, which could result in a significant loss of principal.

**Reinvestment risk** - The Securities will be called automatically if the closing price of the underlying asset is equal to or greater than the initial price on any observation date. In the event that the Securities are called prior to maturity, there is no guarantee that you will be able to reinvest the proceeds from an investment in the Securities at a comparable rate of return for a similar level of risk. To the extent you are able to reinvest such proceeds in an investment comparable to the Securities, you will incur transaction costs and the original issue price for such an investment is likely to include certain built-in costs such as dealer discounts and hedging costs.

**Greater expected volatility generally indicates an increased risk of loss at maturity** - "Volatility" refers to the frequency and magnitude of changes in the price of the underlying asset. The greater the expected volatility of the underlying asset as of the trade date, the greater the expectation is as of the trade date that the closing price of the underlying asset could be less than the coupon barrier on any observation date and that the final price of the underlying asset could be less than the trigger price on the final valuation date and, as a consequence, indicates an increased risk of loss. However, the underlying asset's volatility can change significantly over the term of the Securities, and a relatively lower coupon barrier and/or trigger price may not necessarily indicate that the Securities have a greater likelihood of a return of principal at maturity. You should be willing to accept the downside market risk of the underlying asset and the potential to lose a significant portion or all of your initial investment.

**Credit risk of UBS** - The Securities are unsubordinated, unsecured debt obligations of the issuer, UBS, and are not, either directly or indirectly, an obligation of any third party. Any payment to be made on the Securities, including any repayment of principal, depends on the ability of UBS to satisfy its obligations as they come due. As a result, the actual and perceived creditworthiness of UBS may affect the market value of the Securities and, in the event UBS were to default on its obligations, you may not receive any amounts owed to you under the terms of the Securities and you could lose your

entire investment.

**Market risk** - The price of the underlying asset can rise or fall sharply due to factors specific to that underlying asset and (i) in the case of common stock or American depository receipts, its issuer (the "underlying asset issuer") or (ii) in the case of an exchange traded fund, the securities, futures contracts or physical commodities constituting the assets of that underlying asset. These factors include 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 market volatility and levels, interest rates and economic and political conditions. You, as an investor in the Securities, should make your own investigation into the underlying asset issuer and the underlying asset for your Securities. **We urge you to review financial and other information filed periodically by the underlying asset issuer with the SEC.**

• **Fair value considerations.**

**The issue price you pay for the Securities exceeds their estimated initial value** - The issue price you pay for the Securities exceeds their estimated initial value as of the trade date due to the inclusion in the issue price of the underwriting discount, hedging costs, issuance costs and projected profits. As of the close of the relevant markets on the trade date, we determined the estimated initial value of the Securities by reference to our internal pricing models and it is set forth in this final terms supplement. The pricing models used to determine the estimated initial value of the Securities incorporate certain variables, including the price, volatility and expected dividends on the underlying asset, prevailing interest rates, the term of the Securities and our internal funding rate. Our internal funding rate is typically lower than the rate we would pay to issue conventional fixed or floating rate debt securities of a similar term. The underwriting discount, hedging costs, issuance costs, projected profits and the difference in rates will reduce the economic value of the Securities to you. Due to these factors, the estimated initial value of the Securities as of the trade date is less than the issue price you pay for the Securities.

**The estimated initial value is a theoretical price; the actual price that you may be able to sell your Securities in any secondary market (if any) at any time after the trade date may differ from the estimated initial value** - The value of your Securities at any time will vary based on many factors, including the factors described above and in "- Market risk" above and is impossible to predict. Furthermore, the pricing models that we use are proprietary and rely in part on certain assumptions about future events, which may prove to be incorrect. As a result, after the trade date, if you attempt to sell the Securities in the secondary market, the actual value you would receive may differ, perhaps materially, from the estimated initial value of the Securities determined by reference to our internal pricing models. The estimated initial value of the Securities does not represent a minimum or maximum price at which we or any of our affiliates would be willing to purchase your Securities in any secondary market at any time.

• **Our actual profits may be greater or less than the differential between the estimated initial value and the issue price of the Securities as of the trade date** - We may determine the economic terms of the Securities, as well as hedge our obligations, at least in part, prior to pricing the Securities on the trade date. In addition, there may be ongoing costs to us to maintain and/or adjust any hedges and such hedges are often imperfect. Therefore, our actual profits (or potentially, losses) in issuing the Securities cannot be determined as of the trade date and any such differential between the estimated initial value and the issue price of the Securities as of the trade date does not reflect our actual

profits. Ultimately, our actual profits will be known only at the maturity of the Securities.

• **Limited or no secondary market and secondary market price considerations.**

• **There may be little or no secondary market for the Securities** - The Securities will not be listed or displayed on any securities exchange or any electronic communications network. There can be no assurance that a secondary market for the Securities will develop. UBS Securities LLC and its affiliates may make a market in each offering of the Securities, although they are not required to do so and may stop making a market at any time. If you are able to sell your Securities prior to maturity, you may have to sell them at a substantial loss. The estimated initial value of the Securities does not represent a minimum or maximum price at which we or any of our affiliates would be willing to purchase your Securities in any secondary market at any time.

• **The price at which UBS Securities LLC and its affiliates may offer to buy the Securities in the secondary market (if any) may be greater than UBS' valuation of the Securities at that time, greater than any other secondary market prices provided by unaffiliated dealers (if any) and, depending on your broker, greater than the valuation provided on your customer**

**account statements** - For a limited period of time following the issuance of the Securities, UBS Securities LLC or its affiliates may offer to buy or sell such Securities at a price that exceeds (i) our valuation of the Securities at that time based on our internal pricing models, (ii) any secondary market prices provided by unaffiliated dealers (if any) and (iii) depending on your broker, the valuation provided on customer account statements. The price that UBS Securities LLC may initially offer to buy such Securities following issuance will exceed the valuations indicated by our internal pricing models due to the inclusion for a limited period of time of the aggregate value of the underwriting discount, hedging costs, issuance costs and theoretical projected trading profit. The portion of such amounts included in our price will decline to zero on a straight line basis over a period ending no later than the date specified under "Supplemental Plan of Distribution (Conflicts of Interest); Secondary Markets (if any)." Thereafter, if UBS Securities LLC or an affiliate makes secondary markets for the Securities, it will do so at prices that reflect our estimated value determined by reference to our internal pricing models at that time. The temporary positive differential relative to our internal pricing models arises from requests from and arrangements made by UBS Securities LLC with the selling agents of structured debt securities such as the Securities. As described above, UBS Securities LLC and its affiliates are not required to make a market for the Securities and may stop making a market at any time. The price at which UBS Securities LLC or an affiliate may make secondary markets at any time (if at all) will also reflect its then current bid-ask spread for similar sized trades of structured debt securities. UBS Financial Services Inc. and UBS Securities LLC reflect this temporary positive differential on their customer statements. Investors should inquire as to the valuation provided on customer account statements provided by unaffiliated dealers.

• **Price of Securities prior to maturity** - The market price of the Securities will be influenced by many unpredictable and interrelated factors, including the price of the underlying asset; the volatility of the underlying asset; the dividend rate paid on the underlying asset; the time remaining to the maturity of the Securities; interest rates in the markets; geopolitical conditions and economic, financial, political, force majeure and regulatory or judicial events; the



creditworthiness of UBS and the then current bid-ask spread for the Securities. **Impact of fees and the use of internal funding rates rather than secondary market credit spreads on secondary market prices** - All other things being equal, the use of the internal funding rates described above under “- Fair value considerations” as well as the inclusion in the issue price of the underwriting discount, hedging costs, issuance costs and any projected profits are, subject to the temporary mitigating effect of UBS Securities LLC’s and its affiliates’ market making premium, expected to reduce the price at which you may be able to sell the Securities in any secondary market.

**Owning the Securities is not the same as owning the underlying asset** - The return on your Securities may not reflect the return you would realize if you actually owned the underlying asset. For instance, you will not receive or

- be entitled to receive any dividend payments or other distributions on the underlying asset over the term of your Securities. Furthermore, the underlying asset may appreciate substantially during the term of your Securities and you will not participate in such appreciation.

**No assurance that the investment view implicit in the Securities will be successful** - It is impossible to predict whether and the extent to which the price of the underlying asset will rise or fall. The price of the underlying asset

- will be influenced by complex and interrelated political, economic, financial and other factors that affect the underlying asset issuer. You should be willing to accept the risks of owning equities in general and the underlying asset in particular, and the risk of losing a significant portion or all of your initial investment.

**There is no affiliation between the underlying asset issuer, or for Securities linked to exchange traded funds, the issuers of the constituent stocks comprising the underlying asset (the "underlying asset constituent stock issuers"), and UBS, and UBS is not responsible for any disclosure by such issuer(s)** - We and our affiliates may currently, or from time to time in the future engage in business with the underlying asset issuer or, if applicable, any underlying asset constituent stock issuers. However, we are not affiliated with the underlying asset issuer or any

- underlying asset constituent stock issuers and are not responsible for such issuer’s public disclosure of information, whether contained in SEC filings or otherwise. You, as an investor in the Securities, should make your own investigation into the underlying asset issuer or, if applicable, each underlying asset constituent stock issuer. Neither the underlying asset issuer nor any underlying asset constituent stock issuer is involved in the Securities offered hereby in any way and has no obligation of any sort with respect to your Securities. Such issuer(s) have no obligation to take your interests into consideration for any reason, including when taking any corporate actions that might affect the value of, and any amounts payable on, your Securities.

- **The calculation agent can make adjustments that affect the payment to you at maturity**- For certain corporate events affecting the underlying asset, the calculation agent may make adjustments to the initial price, the coupon barrier, the trigger price and/or the final price of the underlying asset. However, the calculation agent will not make an adjustment in response to all events that could affect the underlying asset. If an event occurs that does not require the calculation agent to make an adjustment, the value of the Securities may be materially and adversely affected. In addition, all determinations and calculations concerning any such adjustments will be made by the calculation agent. 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 the accompanying product supplement as necessary to achieve an equitable result. In the case of common stock or American depositary receipts, following certain corporate events relating to the issuer of the underlying asset where the issuer is not the surviving entity, the amount of cash you receive at maturity may be based on the common stock or American depositary receipts of a successor to the underlying asset issuer in combination with any cash or any other assets distributed to holders of the underlying asset in such corporate event. Additionally, if the issuer of the underlying asset becomes subject to (i) a reorganization event whereby the underlying asset is exchanged solely for cash, (ii) a merger or consolidation with UBS or any of its affiliates or (iii) an underlying asset is delisted or otherwise suspended from trading, the amount you receive at maturity may be based on the common stock or American depositary receipts issued by another company. In the case of an exchange traded fund, following a suspension from trading or if an exchange traded fund is discontinued, the amount you receive at maturity may be based on a share of another exchange traded fund. The

occurrence of these corporate events and the consequent adjustments may materially and adversely affect the value of the Securities. For more information, see the sections "General Terms of the Securities -- Antidilution Adjustments for Securities Linked to an Underlying Asset or Equity Basket Asset" and " --Reorganization Events for Securities Linked to an Underlying Asset or Equity Basket Asset" in the accompanying product supplement. Regardless of the occurrence of one or more dilution or reorganization events, you should note that at maturity UBS will pay you an amount in cash equal to your principal amount, unless the final price of the underlying asset is below the trigger price (as such trigger price may be adjusted by the calculation agent upon occurrence of one or more such events). Regardless of any of the events discussed above, any payment on the Securities is subject to the creditworthiness of UBS.

**Potential UBS impact on the market price of the underlying asset** - Trading or transactions by UBS or its affiliates in the underlying asset and/or over-the-counter options, futures or other instruments with returns linked to the performance of the underlying asset may adversely affect the market price of the underlying asset and, therefore, the market value of, and any amounts payable on, your Securities.

**Potential conflict of interest** - UBS and its affiliates may engage in business with the issuer of the underlying asset, which may present a conflict between the obligations of UBS and you, as a holder of the Securities. There are also potential conflicts of interest between you and the calculation agent, which will be an affiliate of UBS. The calculation agent will determine whether the final price is below the trigger price and accordingly the payment at maturity on your Securities. The calculation agent may also postpone the determination of the final price and the maturity date if a market disruption event occurs and is continuing on the final valuation date and may make adjustments to the initial price, the trigger price, the coupon barrier, the final price and/or the underlying asset itself for certain corporate events affecting the underlying asset. For more information, see the sections "General Terms of the Securities -- Antidilution Adjustments for Securities Linked to an Underlying Asset or Equity Basket Asset" and " --Reorganization Events for Securities Linked to an Underlying Asset or Equity Basket Asset" in the accompanying product supplement. As UBS determines the economic terms of the Securities, including the contingent coupon rate, trigger price and coupon barrier, and such terms include the underwriting discount, hedging costs, issuance costs and projected profits, the Securities represent a package of economic terms. There are other potential conflicts of interest insofar as an investor could potentially get better economic terms if that investor entered into exchange-traded and/or OTC derivatives or other instruments with third parties, assuming that such instruments were available and the investor had the ability to assemble and enter into such instruments.

**Potentially inconsistent research, opinions or recommendations by UBS** - UBS and its affiliates publish research from time to time on financial markets and other matters that may influence the value of the Securities, or express opinions or provide recommendations that are inconsistent with purchasing or holding the Securities. Any research, opinions or recommendations expressed by UBS or its affiliates may not be consistent with each other and may be modified from time to time without notice. Investors should make their own independent investigation of the merits of investing in the Securities and the underlying asset to which the Securities are linked.

**The Securities are not bank deposits** - An investment in the Securities carries risks which are very different from the risk profile of a bank deposit placed with UBS or its affiliates. The Securities have different yield and/or return, liquidity and risk profiles and would not benefit from any protection provided to deposits.

**If UBS experiences financial difficulties, FINMA has the power to open restructuring or liquidation proceedings in respect of, and/or impose protective measures in relation to, UBS, which proceedings or measures may have a material adverse effect on the terms and market value of the Securities and/or the ability of UBS to make payments thereunder** - The Swiss Financial Market Supervisory Authority ("FINMA") has broad statutory powers to take measures and actions in relation to UBS if (i) it concludes that there is justified concern that UBS is over-indebted or has serious liquidity problems or (ii) UBS fails to fulfil the applicable capital adequacy requirements (whether on a standalone or consolidated basis) after expiry of a deadline set by FINMA. If one of these pre-requisites is met, FINMA is authorized to open restructuring proceedings or liquidation (bankruptcy) proceedings in respect of, and/or impose protective measures in relation to, UBS. The Swiss Banking Act grants significant discretion to FINMA in connection with the aforementioned proceedings and measures. In particular, a broad variety of protective measures may be imposed by FINMA, including a bank moratorium or a maturity postponement, which measures may be ordered by FINMA either on a stand-alone basis or in connection with restructuring or liquidation proceedings. The resolution regime of the Swiss Banking Act is further detailed in

the FINMA Banking Insolvency Ordinance (“BIO-FINMA”). In a restructuring proceeding, FINMA, as resolution authority, is competent to approve the resolution plan. The resolution plan may, among other things, provide for (a) the transfer of all or a portion of UBS’s assets, debts, other liabilities and contracts (which may or may not include the contractual relationship between UBS and the holders of Securities) to another entity, (b) a stay (for a maximum of two business days) on the termination of contracts to which UBS is a party, and/or the exercise of (w) rights to terminate, (x) netting rights, (y) rights to enforce or dispose of collateral or (z) rights to transfer claims, liabilities or collateral under contracts to which UBS is a party, (c) the conversion of UBS’s debt and/or other obligations, including its obligations under the Securities, into equity (a “debt-to-equity” swap), and/or (d) the partial or full write-off of obligations owed by UBS (a “write-off”), including its obligations under the Securities. The BIO-FINMA provides that a debt-to-equity swap and/or a write-off of debt and other obligations (including the Securities) may only take place after (i) all debt instruments issued by UBS qualifying as additional tier 1 capital or tier 2 capital have been converted into equity or written-off, as applicable, and (ii) the existing equity of UBS has been fully cancelled. While the BIO-FINMA does not expressly address the order in which a write-off of debt instruments other than debt instruments qualifying as additional tier 1 capital or tier 2 capital should occur, it states that debt-to-equity swaps should occur in the following order: first, all subordinated claims not qualifying as regulatory capital; second, all other claims not excluded by law from a debt-to-equity swap (other than deposits); and third, deposits (in excess of the amount privileged by law). However, given the broad discretion granted to FINMA as the resolution authority, any restructuring plan in respect of UBS could provide that the claims under or in connection with the Securities will be partially or fully converted into equity or written-off, while preserving other obligations of UBS that rank *pari passu* with, or even junior to, UBS’s obligations under the Securities. Consequently, holders of Securities may lose all or some of their investment in the Securities. In the case of restructuring proceedings with respect to a systemically important Swiss bank (such as UBS), the creditors whose claims are affected by the restructuring plan will not have a right to vote on, reject, or seek the suspension of the restructuring plan. In addition, if a restructuring plan has been approved by FINMA, the rights of a creditor to seek judicial review of the restructuring plan (e.g., on the grounds that the plan would unduly prejudice the rights of holders of Securities or otherwise be in violation of the Swiss Banking Act) are very limited. In particular, a court may not suspend the implementation of the restructuring plan. Furthermore, even if a creditor successfully challenges the restructuring plan, the court can only require the relevant creditor to be compensated *ex post* and there is currently no guidance as to on what basis such compensation would be calculated or how it would be funded.

**Dealer incentives** - UBS and its affiliates act in various capacities with respect to the Securities. We and our affiliates may act as a principal, agent or dealer in connection with the sale of the Securities. Such affiliates, including the sales representatives, will derive compensation from the distribution of the Securities and such compensation may serve as an incentive to sell these Securities instead of other investments. We will pay total underwriting compensation of 1.50% per Security to any of our affiliates acting as agents or dealers in connection with the distribution of the Securities. Given that UBS Securities LLC and its affiliates temporarily maintain a market making premium, it may have the effect of discouraging UBS Securities LLC and its affiliates from recommending sale of your Securities in the secondary market.

**Uncertain tax treatment** - Significant aspects of the tax treatment of the Securities are uncertain. You should read carefully the sections entitled “What are the Tax Consequences of the Securities” herein and in the prospectus supplement and “Material U.S. Federal Income Tax Consequences” in the accompanying product supplement, and consult your tax advisor about your tax situation.

### **Information about the Underlying Asset**

All disclosures regarding the underlying asset are derived from publicly available information. UBS has not conducted any independent review or due diligence of any publicly available information with respect to the underlying asset. **You should make your own investigation into the underlying asset.**

The underlying asset will be registered under the Securities Act of 1933, the Securities Exchange Act of 1934 (as amended, the “Exchange Act”) and/or the Investment Company Act of 1940, each as amended. Companies with

securities registered with the SEC are required to file financial and other information specified by the SEC periodically. Information filed by the underlying asset issuer with the SEC can be reviewed electronically through a website maintained by the SEC. The address of the SEC's website is <http://www.sec.gov>. Information filed with the SEC by the underlying asset issuer can be located by reference to its SEC file number provided below. In addition, information filed with the SEC can be inspected and copied at the Public Reference Section of the SEC, 100 F Street, N.E., Room 1580, Washington, D.C. 20549. Copies of this material can also be obtained from the Public Reference Section, at prescribed rates.

### **Apple Inc.**

According to publicly available information, Apple Inc. ("Apple") designs, manufactures and markets mobile communication and media devices, personal computers, and portable digital music players, and sells a variety of related software, services, accessories, networking solutions, and third-party digital content and applications. Information filed by Apple with the SEC can be located by reference to its SEC file number 001-36743, or its CIK Code: 0000320193. Apple's website is [apple.com](http://apple.com). Apple's common stock is listed on the NASDAQ Global Select Market under the ticker symbol "AAPL."

Information from outside sources is not incorporated by reference in, and should not be considered part of, this final terms supplement or any accompanying prospectus. UBS has not conducted any independent review or due diligence of any publicly available information with respect to the underlying asset.

### **Historical Information**

The following table sets forth the quarterly high and low closing prices for Apple's common stock, based on daily closing prices on the primary exchange for Apple. We obtained the closing prices below from Bloomberg Professional service ("Bloomberg"), without independent verification. The closing prices may be adjusted by Bloomberg for corporate actions such as stock splits, public offerings, mergers and acquisitions, spin-offs, extraordinary dividends, delistings and bankruptcy. UBS has not undertaken an independent review or due diligence of any publicly available information obtained from Bloomberg. Apple's closing price on November 20, 2018 was \$176.98. **Past performance of the underlying asset is not indicative of the future performance of the underlying asset.**

<b>Quarter Begin</b>	<b>Quarter End</b>	<b>Quarterly High</b>	<b>Quarterly Low</b>	<b>Quarterly Close</b>
01/02/2014	03/31/2014	\$79.62	\$71.35	\$76.68
04/01/2014	06/30/2014	\$94.25	\$73.99	\$92.93
07/01/2014	09/30/2014	\$103.30	\$93.08	\$100.75
10/01/2014	12/31/2014	\$119.00	\$96.26	\$110.38

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01/02/2015	03/31/2015	\$133.00	\$105.99	\$124.43
04/01/2015	06/30/2015	\$132.65	\$124.25	\$125.42
07/01/2015	09/30/2015	\$132.07	\$103.12	\$110.30
10/01/2015	12/31/2015	\$122.57	\$105.26	\$105.26
01/04/2016	03/31/2016	\$109.56	\$93.42	\$108.99
04/01/2016	06/30/2016	\$112.10	\$90.34	\$95.60
07/01/2016	09/30/2016	\$115.57	\$94.99	\$113.05
10/03/2016	12/30/2016	\$118.25	\$105.71	\$115.82
01/03/2017	03/31/2017	\$144.12	\$116.02	\$143.66
04/03/2017	06/30/2017	\$156.10	\$140.68	\$144.02
07/03/2017	09/29/2017	\$164.05	\$142.73	\$154.12
1,019.95	1,126.42			
1/1/2010	3/31/2010	1,180.69	1,044.50	1,169.43
4/1/2010	6/30/2010	1,219.80	1,028.33	1,030.71
7/1/2010	9/30/2010	1,157.16	1,010.91	1,141.20
10/1/2010	12/30/2010	1,262.60	1,131.87	1,257.88
1/1/2011	3/31/2011	1,344.07	1,249.05	1,325.83
4/1/2011	6/30/2011	1,370.58	1,258.07	1,320.64
7/1/2011	9/30/2011	1,356.48	1,101.54	1,131.42
10/1/2011	12/30/2011	1,292.66	1,074.77	1,257.61
1/1/2012	3/30/2012	1,419.15	1,258.86	1,408.47
4/1/2012	6/29/2012	1,422.38	1,266.74	1,362.16
7/1/2012	9/28/2012	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	3/28/2013	1,570.28	1,426.19	1,569.19
4/1/2013	6/28/2013	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

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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	1,991.68	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	3/31/2017	2,400.98	2,245.13	2,362.72
4/1/2017	6/30/2017	2,453.82	2,328.95	2,423.41
7/1/2017	9/29/2017	2,519.44	2,407.70	2,519.36
10/1/2017	12/29/2017	2,694.97	2,520.40	2,673.61
1/1/2018	3/29/2018	2,872.87	2,532.69	2,640.87
4/1/2018	4/30/2018	2,717.49	2,553.80	2,648.05

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#### Russell 2000<sup>®</sup> Index (“RTY”)

##### The RTY

The RTY was developed by Russell Investments (“Russell”) before FTSE International Limited and Russell combined in 2015 to create FTSE Russell, which is wholly owned by London Stock Exchange Group. Russell began dissemination of the RTY (Bloomberg L.P. index symbol “RTY”) on January 1, 1984. FTSE Russell calculates and publishes the RTY. The RTY was set to 135 as of the close of business on December 31, 1986. The RTY is designed to track the performance of the small capitalization segment of the U.S. equity market. As a subset of the Russell 3000<sup>®</sup> Index, the RTY consists of the smallest 2,000 companies included in the Russell 3000<sup>®</sup> Index. The Russell 3000<sup>®</sup> Index measures the performance of the largest 3,000 U.S. companies, representing approximately 98% of the investable U.S. equity market. The RTY is determined, comprised, and calculated by FTSE Russell without regard to the Notes.

##### Selection of Stocks Underlying the RTY

All companies eligible for inclusion in the RTY must be classified as a U.S. company under FTSE Russell’s country-assignment methodology. If a company is incorporated, has a stated headquarters location, and trades in the same country (American Depositary Receipts and American Depositary Shares are not eligible), then the company is assigned to its country of incorporation. If any of the three factors are not the same, FTSE Russell defines three Home Country Indicators (“HCIs”): country of incorporation, country of headquarters, and country of the most liquid exchange (as defined by a two-year average daily dollar trading volume) (“ADDTV”) from all exchanges within a country. Using the HCIs, FTSE Russell compares the primary location of the company’s assets with the three HCIs. If the primary location of its assets matches any of the HCIs, then the company is assigned to the primary location of its assets. If there is insufficient information to determine the country in which the company’s assets are primarily located, FTSE Russell will use the primary country from which the company’s revenues are primarily derived for the comparison with the three HCIs in a similar manner. FTSE Russell uses the average of two years of assets or revenues data to reduce potential turnover. If conclusive country details cannot be derived from assets or revenues data, FTSE Russell will assign the company to the country of its headquarters, which is defined as the address of the company’s principal executive offices, unless that country is a Benefit Driven Incorporation “BDI” country, in which case the company will be assigned to the country of its most liquid stock exchange. BDI countries include: Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bermuda, Bonaire, British Virgin Islands, Cayman Islands, Channel Islands, Cook Islands, Curacao, Faroe Islands, Gibraltar, Guernsey, Isle of Man, Jersey, Liberia, Marshall Islands, Panama, Saba, Sint Eustatius, Sint Maarten, and Turks and Caicos Islands. For any companies incorporated or headquartered in a U.S. territory, including countries such as Puerto Rico, Guam, and U.S. Virgin Islands, a U.S. HCI is assigned.

All securities eligible for inclusion in the RTY must trade on a major U.S. exchange. Stocks must have a closing price at or above \$1.00 on their primary exchange on the last trading day in May to be eligible for inclusion during annual reconstitution. However, in order to reduce unnecessary turnover, if an existing member’s closing price is less than \$1.00 on the last day of May, it will be considered eligible if the average of the daily closing prices (from its primary exchange) during the month of May is equal to or greater than \$1.00. Initial public offerings are added each quarter and must have a closing price at or above \$1.00 on the last day of their eligibility period in order to qualify for index inclusion. If an existing stock does not trade on the “rank day” (typically the last trading day in May but a confirmed timetable is announced each spring) but does have a closing price at or above \$1.00 on another eligible U.S. exchange, that stock will be eligible for inclusion.

An important criterion used to determine the list of securities eligible for the RTY is total market capitalization, which is defined as the market price as of the rank day in May for those securities being considered at annual reconstitution times the total number of shares outstanding. Where applicable, common stock, non-restricted exchangeable shares and partnership units/membership interests are used to determine market capitalization. Any other form of shares such

as preferred stock, convertible preferred stock, redeemable shares, participating preferred stock, warrants, rights, installment receipts or trust receipts, are excluded from the calculation. If multiple share classes of common stock exist, they are combined to determine total shares outstanding. In cases where the common stock share classes act independently of each other (e.g., tracking stocks), each class is considered for inclusion separately. If multiple share classes exist, the pricing vehicle will be designated as the share class with the highest two-year trading volume as of the rank day in May.

Companies with a total market capitalization of less than \$30 million are not eligible for the RTY. Similarly, companies with only 5% or less of their shares available in the marketplace are not eligible for the RTY. Royalty trusts, limited liability companies, closed-end investment companies (companies that are required to report Acquired Fund Fees and Expenses, as defined by the SEC, including business development companies), blank check companies, special purpose acquisition companies, and limited partnerships are also ineligible for inclusion. Exchange traded funds and mutual funds are also excluded. Bulletin board, pink sheets, and over-the-counter (“OTC”) traded securities are not eligible for inclusion.

Annual reconstitution is a process by which the RTY is completely rebuilt. Based on closing levels of the company’s common stock on its primary exchange on the rank day of May of each year, FTSE Russell reconstitutes the composition of the RTY using the then existing market capitalizations of eligible companies. Reconstitution of the RTY occurs on the last Friday in June or, when the last Friday in June is the 29th or 30th, reconstitution occurs on the prior Friday. In addition, FTSE Russell adds initial public offerings to the RTY on

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a quarterly basis based on total market capitalization ranking within the market-adjusted capitalization breaks established during the most recent reconstitution.

After membership is determined, a security's shares are adjusted to include only those shares available to the public. This is often referred to as "free float." The purpose of the adjustment is to exclude from market calculations the capitalization that is not available for purchase and is not part of the investable opportunity set.

#### License Agreement

FTSE Russell and Royal Bank have entered into a non-exclusive license agreement providing for the license to Royal Bank, and certain of its affiliates, in exchange for a fee, of the right to use indices owned and published by FTSE Russell in connection with some securities, including the Notes.

FTSE Russell does not guarantee the accuracy and/or the completeness of the RTY or any data included in the RTY and has no liability for any errors, omissions, or interruptions in the RTY. FTSE Russell makes no warranty, express or implied, as to results to be obtained by the calculation agent, holders of the Notes, or any other person or entity from the use of the RTY or any data included in the RTY in connection with the rights licensed under the license agreement described in this document or for any other use. FTSE Russell makes no express or implied warranties, and hereby expressly disclaims all warranties of merchantability or fitness for a particular purpose with respect to the RTY or any data included in the RTY. Without limiting any of the above information, in no event will FTSE Russell have any liability for any special, punitive, indirect or consequential damages, including lost profits, even if notified of the possibility of these damages.

The Notes are not sponsored, endorsed, sold or promoted by FTSE Russell. FTSE Russell makes no representation or warranty, express or implied, to the owners 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 RTY to track general stock market performance or a segment of the same. FTSE Russell's publication of the RTY in no way suggests or implies an opinion by FTSE Russell as to the advisability of investment in any or all of the stocks upon which the RTY is based. FTSE Russell's only relationship to Royal Bank is the licensing of certain trademarks and trade names of FTSE Russell and of the RTY, which is determined, composed and calculated by FTSE Russell without regard to Royal Bank or the Notes. FTSE Russell is not responsible for and has not reviewed the Notes nor any associated literature or publications and FTSE Russell makes no representation or warranty express or implied as to their accuracy or completeness, or otherwise. FTSE Russell reserves the right, at any time and without notice, to alter, amend, terminate or in any way change the RTY. FTSE Russell has no obligation or liability in connection with the administration, marketing or trading of the Notes.

"Russell 2000" and "Russell 3000" are registered trademarks of FTSE Russell in the U.S. and other countries.

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#### Historical Information

The graph below sets forth the information relating to the historical performance of the RTY. In addition, below the graph is a table setting forth the intra-day high, intra-day low and period-end closing levels of this Reference Asset. The information provided in this table is for 2008 to 2017, the first quarter of 2018, and the period from April 1, 2018 to April 30, 2018.

We obtained the information regarding the historical performance of the RTY 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 RTY should not be taken as an indication of its future performance, and no assurance can be given as to the Final Level of the RTY. We cannot give you assurance that the performance of the RTY will result in any positive return on your initial investment.

Russell 2000® Index (“RTY”)

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Period-Start Date	Period-End Date	High Intra-Day Level of this Reference Asset	Low Intra-Day Level of this Reference Asset	Period-End Closing Level of this Reference Asset
1/1/2008	3/31/2008	768.460	643.280	687.967
4/1/2008	6/30/2008	763.270	684.880	689.659
7/1/2008	9/30/2008	764.380	647.370	679.583
10/1/2008	12/30/2008	679.570	371.260	482.770
1/1/2009	3/31/2009	519.180	342.570	422.748
4/1/2009	6/30/2009	535.850	412.770	508.282
7/1/2009	9/30/2009	625.310	473.540	604.278
10/1/2009	12/30/2009	635.990	553.320	633.409
1/1/2010	3/31/2010	693.320	580.490	678.643
4/1/2010	6/30/2010	745.950	607.300	609.486
7/1/2010	9/30/2010	678.900	587.600	676.139
10/1/2010	12/30/2010	793.280	669.430	789.737
1/1/2011	3/31/2011	843.730	771.710	843.548
4/1/2011	6/30/2011	868.570	772.620	827.429
7/1/2011	9/30/2011	860.370	634.710	644.156
10/1/2011	12/30/2011	769.460	601.710	740.916
1/1/2012	3/30/2012	847.920	736.780	830.301
4/1/2012	6/29/2012	841.060	729.750	798.487
7/1/2012	9/28/2012	868.500	765.050	837.450
10/1/2012	12/31/2012	853.570	763.550	849.350
1/1/2013	3/28/2013	954.000	849.330	951.542
4/1/2013	6/28/2013	1,008.230	898.400	977.475
7/1/2013	9/30/2013	1,082.000	981.300	1,073.786
10/1/2013	12/31/2013	1,167.960	1,037.860	1,163.637
1/1/2014	3/31/2014	1,212.823	1,082.717	1,173.038
4/1/2014	6/30/2014	1,193.964	1,082.531	1,192.964
7/1/2014	9/30/2014	1,213.550	1,101.675	1,101.676
10/1/2014	12/31/2014	1,221.442	1,040.472	1,204.696
1/1/2015	3/31/2015	1,268.162	1,151.295	1,252.772
4/1/2015	6/30/2015	1,295.996	1,211.126	1,253.947
7/1/2015	9/30/2015	1,275.899	1,078.633	1,100.688
10/1/2015	12/31/2015	1,205.079	1,080.606	1,135.889
1/1/2016	3/31/2016	1,134.078	943.097	1,114.028
4/1/2016	6/30/2016	1,190.172	1,085.883	1,151.923
7/1/2016	9/30/2016	1,263.460	1,131.713	1,251.646
10/1/2016	12/30/2016	1,392.714	1,156.085	1,357.130
1/1/2017	3/31/2017	1,414.824	1,335.038	1,385.920
4/1/2017	6/30/2017	1,433.790	1,345.244	1,415.359
7/1/2017	9/29/2017	1,493.555	1,349.354	1,490.861
10/1/2017	12/29/2017	1,559.607	1,454.165	1,535.511
1/1/2018	3/29/2018	1,615.517	1,436.427	1,529.427

4/1/2018	4/30/2018	1,592.039	1,482.897	1,541.884
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#### SUPPLEMENTAL DISCUSSION OF U.S. FEDERAL INCOME TAX CONSEQUENCES

The following disclosure supplements, and to the extent inconsistent supersedes, the discussion in the product prospectus supplement dated January 12, 2016 under “Supplemental Discussion of U.S. Federal Income Tax Consequences.” The discussions below and in the accompanying product prospectus supplement do not address the tax consequences applicable to holders subject to Section 451(b) of the Code.

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, 2019. Based on our determination that the Notes are not delta-one instruments, non-U.S. holders should not be subject to withholding on dividend equivalent payments, if any, under the Notes. However, it is possible that the Notes could be treated as deemed reissued for U.S. federal income tax purposes upon the occurrence of certain events affecting the Reference Assets or the Notes (for example, upon a Reference Asset rebalancing), 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 Assets 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.

#### 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 May 31, 2018, which is the second (2<sup>nd</sup>) business day following the Pricing Date (this settlement cycle being referred to as “T+2”). 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. In the initial offering of the Notes, they will be offered to investors at a purchase price equal to par, except with respect to certain accounts as indicated on the cover page of this document.

The value of the Notes shown on your account statement may be based on RBCCM’s estimate of the value of the Notes if RBCCM or another of our affiliates were to make a market in the Notes (which it is not obligated to do). That estimate will be based upon the price that RBCCM may pay for the Notes in light of then prevailing market conditions, our creditworthiness and transaction costs. For a period of approximately 6 months after the issue date of the Notes, the value of the Notes that may be shown on your account statement may be higher than RBCCM’s estimated value of the Notes at that time. This is because the estimated value of the Notes will not include the underwriting discount and our hedging costs and profits; however, the value of the Notes shown on your account statement during that period may be a higher amount, reflecting the addition of RBCCM’s underwriting discount and 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.

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

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

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Barrier Booster Notes Linked to the Lesser  
Performing of Two Equity Indices,  
Due December 2, 2021  
Royal Bank of Canada

available to retail investors in the EEA has been prepared, and therefore, offering or selling the Notes or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

#### STRUCTURING THE NOTES

The Notes are our debt securities, the return on which is linked to the performance of the Reference Assets. 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 Assets, 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 the underwriting commission and 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.

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