

UBS AG  
Form 424B2  
December 10, 2018

Filed Pursuant to Rule 424(b)(2)

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 Autocallable Optimization Securities**

UBS AG \$270,000.00 Securities Linked to the common stock of Amazon.com, Inc. due December 15, 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 Amazon.com, Inc.
Call Feature	The Securities will be called 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, UBS will pay you on the applicable call settlement date a cash payment per Security equal to the call price for the applicable observation date.
Observation Dates	As specified in Call Price below.
Call Return	The call return increases the longer the Securities are outstanding and is based upon the call return rate.
Call Return Rate	18.55% per annum (or approximately 4.638% per outstanding quarter). The call price equals the principal amount per Security plus the applicable call return.
Call Price	The table below reflects the call return rate of 18.55% per annum. Amounts in the table below may have been rounded for ease of analysis.

Observation Date*	Call Return	Call Price (per Security)
11-Mar-2019	4.638%	\$10.4638

Edgar Filing: UBS AG - Form 424B2

10-Jun-2019	9.275%	\$10.9275
10-Sep-2019	13.913%	\$11.3913
10-Dec-2019	18.550%	\$11.8550
10-Mar-2020	23.188%	\$12.3188
10-Jun-2020	27.825%	\$12.7825
10-Sep-2020	32.463%	\$13.2463
10-Dec-2020	37.100%	\$13.7100

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

Payment at Maturity (per Security) If the Securities have not been called and the final price of the Underlying Asset is equal to or greater than the trigger price, we will pay you an amount in cash at maturity equal to your principal amount.

If the Securities have not been called and the final price of the Underlying Asset is below the trigger price, we will pay you an amount in cash that is 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  $\$10 + (\$10 \times \text{underlying return})$ .

Final Price – 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 \$1641.03, 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 \$1148.72, which is 70.00% 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 December 10, 2018

Settlement Date December 12, 2018

Final Valuation Date December 10, 2020, subject to postponement in the event of a market disruption event as described in the accompanying product supplement.

Maturity Date

December 15, 2020, subject to postponement in the event of a market disruption event as described in the accompanying product supplement.

Call Settlement Dates Three business days following each observation date, except that the call settlement date for the final valuation date is the maturity date.

CUSIP 90286L844

ISIN US90286L8440

Valoren 45048051

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 6 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 Amazon.com, Inc.	\$270,000.00	\$10.00	\$4,050.00	\$0.15	\$265,950.00	\$9.85

UBS AG \$270,000.00 Securities Linked to the common stock of Amazon.com, Inc. due December 15, 2020

## UBS Financial Services Inc.

Final Terms Supplement dated December 10, 2018

## UBS Investment Bank

### 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/1114446/000091412118002130/ub46175275-424b2.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 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 the “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 make periodic interest payments or 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 you will lose a significant portion or all of your initial investment in an amount proportionate to the decline in the price of the Underlying Asset.

- **Higher call return 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 the 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 call return rate for the Securities. However, the Underlying Asset’s volatility can change significantly over the term of the Securities and the price of the Underlying Asset could fall sharply, which could result in a significant loss of principal.

- **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.

- **Your potential return on the Securities is limited to the call return** - The return potential of the Securities is limited to the call return regardless of the appreciation of the Underlying Asset. In addition, because the call return increases the longer the Securities have been outstanding, the call price payable on earlier observation dates is less than the call price payable on later observation dates. The earlier the Securities are called, the lower your return will be. If the Securities are not called, you will not receive any call return. As an investor in the Securities, you will not participate in any appreciation in the price of the Underlying Asset even though you will be subject to the risk of a decline in the price of the Underlying Asset.

- **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 final price of the underlying asset could be less than the trigger price 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 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.

**No interest payments** - UBS will not pay interest with respect to the Securities.

**Reinvestment risk** - If your Securities are called early, the term of the Securities will be reduced and you will not receive any payment on the Securities after the applicable call settlement date. There is no guarantee that you would be able to reinvest the proceeds from an automatic call of 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 may incur transaction costs such as dealer discounts and hedging costs built into the price of the new securities. Because the Securities may be called as early as the first observation date after issuance, you should be prepared in the event the Securities are called early.

**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 depositary 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 to assume the risk that, if the Securities are not automatically called, you will not receive any positive return on your Securities and you may lose 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 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 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 depository receipts, following certain corporate events relating to the issuer of the Underlying Asset where such issuer is not the surviving entity, the amount of cash you receive at maturity (if any) may be based on the common stock or American depository 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 depository 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 thesections "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. The calculation agent, an affiliate of UBS, 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 closing price of the Underlying Asset if a market disruption event occurs and is continuing on any observation date (including the final valuation date) and may make adjustments to the initial price, trigger price, the final price and/or the Underlying Asset itself for certain corporate events affecting the Underlying Asset. For more information, see thesections "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 call return rate and trigger price, 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 may publish research or express opinions or provide recommendations that are inconsistent with purchasing or holding the Securities, and which may be revised without notice. Any research, opinions or recommendations expressed by UBS or its affiliates may not be consistent with each other and may influence the value of the Securities. 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.

### **Amazon.com, Inc.**

According to publicly available information, Amazon.com, Inc. ("Amazon") is an online retail company offering a variety of products sold by Amazon and third parties. Amazon also manufactures and sells electronic devices, including Kindle e-readers, Fire tablets, Fire TVs and Echo. Information filed by Amazon with the SEC can be located by reference to its SEC file number: 000-22513, or its CIK Code: 0001018724. Amazon's website is [amazon.com](http://amazon.com). Amazon's common stock is listed on the NASDAQ Global Select Market under the ticker symbol "AMZN."

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 Amazon's common stock, based on daily closing prices on the primary exchange for Amazon. 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. Amazon's closing price on December 10, 2018 was \$1,641.03. **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	\$407.05	\$336.52	\$336.52
04/01/2014	06/30/2014	\$342.99	\$288.32	\$324.78
07/01/2014	09/30/2014	\$360.84	\$307.06	\$322.44
10/01/2014	12/31/2014	\$338.64	\$287.06	\$310.35
01/02/2015	03/31/2015	\$387.83	\$286.95	\$372.10
04/01/2015	06/30/2015	\$445.99	\$370.26	\$434.09
07/01/2015	09/30/2015	\$548.39	\$429.70	\$511.89
10/01/2015	12/31/2015	\$693.97	\$520.72	\$675.89
01/04/2016	03/31/2016	\$636.99	\$482.07	\$593.64
04/01/2016	06/30/2016	\$728.24	\$586.14	\$715.62
07/01/2016	09/30/2016	\$837.31	\$725.68	\$837.31
10/03/2016	12/30/2016	\$844.36	\$719.07	\$749.87

Edgar Filing: UBS AG - Form 424B2

01/03/2017	03/31/2017	\$886.54	\$753.67	\$886.54	
04/03/2017	06/30/2017	\$1,011.34	\$884.67	\$968.00	
07/03/2017	09/29/2017	\$1,052.80	\$938.60		<p>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 Internal Revenue Service has issued guidance that states that the U.S. Treasury Department and the Internal Revenue Service 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 Securities are not delta-one instruments, non-U.S. holders should not be subject to withholding on dividend equivalent payments, if any, under the Securities. However, it is possible that the Securities could be treated as deemed reissued for U.S. federal income tax purposes upon the occurrence of certain events affecting the Underlying or the Securities (for example, upon an Underlying rebalancing), and following such occurrence the Securities 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 Underlying or the Securities should consult their tax advisors as to the application of the dividend equivalent withholding tax in the context of the Securities 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.</p>

Individual holders that own “specified foreign financial assets” may be required to include certain information with respect to such assets with their U.S. federal income tax return. You are urged to consult your own tax advisor regarding such requirements with respect to the Securities.

Please see the discussion under the section entitled “Supplemental Discussion of U.S. Federal Income Tax Consequences” in the accompanying product prospectus supplement for a further discussion of the U.S. federal income tax consequences of an investment in the Securities.

**Canadian Federal Income Tax Consequences**

For a discussion of the material Canadian federal income tax consequences relating to an investment in the Securities, please see the section entitled “Tax Consequences—Canadian Taxation” in the accompanying prospectus, which you should carefully review prior to investing in the Securities.

#### Information About the Underlying

All disclosures contained in this document regarding the Underlying, including, without limitation, its make up, method of calculation, and changes in its components, have been derived from publicly available sources. The information reflects the policies of, and is subject to change by, STOXX Limited, as the sponsor of the Underlying (“STOXX”). STOXX, which owns the copyright and all other rights to the Underlying, has no obligation to continue to publish, and may discontinue publication of, the Underlying. Neither we nor RBCCM accepts any responsibility for the calculation, maintenance or publication of the Underlying or any successor index.

The Underlying was created by STOXX Limited, a subsidiary of Deutsche Börse AG. Publication of the Underlying began in February 1998, based on an initial index level of 1,000 at December 31, 1991.

#### Composition and Maintenance

The Underlying is composed of 50 component stocks of market sector leaders from within the 19 EURO STOXX<sup>®</sup> Supersector indices, which represent the Eurozone portion of the STOXX Europe 600<sup>®</sup> Supersector indices.

The composition of the Underlying is reviewed annually, based on the closing stock data on the last trading day in August. The component stocks are announced on the first trading day in September. Changes to the component stocks are implemented on the third Friday in September and are effective the following trading day. Changes in the composition of the Underlying are made to ensure that the Underlying includes the 50 market sector leaders from within the Underlying.

The free float factors for each component stock used to calculate the Underlying, as described below, are reviewed, calculated, and implemented on a quarterly basis and are fixed until the next quarterly review.

The Underlying is also reviewed on an ongoing monthly basis. Corporate actions (including initial public offerings, mergers and takeovers, spin-offs, delistings, and bankruptcy) that affect the Underlying composition are announced immediately, implemented two trading days later and become effective on the next trading day after implementation.

#### Calculation of the Underlying

The Underlying is calculated with the “Laspeyres formula,” which measures the aggregate price changes in the component stocks against a fixed base quantity weight. The formula for calculating the Underlying value can be expressed as follows:

$$\text{Underlying} = \frac{\text{Free float market capitalization of the Underlying}}{\text{Divisor}}$$

The “free float market capitalization of the Underlying” is equal to the sum of the products of the price, the number of shares, the free float factor and the weighting cap factor for each component stock as of the time the Underlying is being calculated.

The Underlying is also subject to a divisor, which is adjusted to maintain the continuity of the Underlying values across changes due to corporate actions, such as the deletion and addition of stocks, the substitution of stocks, stock dividends, and stock splits.

License Agreement

We have entered into a non-exclusive license agreement with STOXX providing for the license to us and certain of our affiliated or subsidiary companies, in exchange for a fee, of the right to use indices owned and published by STOXX (including the Underlying) in connection with certain securities, including the Securities offered hereby. The license agreement between us and STOXX requires that the following language be stated in this document:

STOXX has no relationship to us, other than the licensing of the Underlying and the related trademarks for use in connection with the Securities. STOXX does not:

- sponsor, endorse, sell, or promote the Securities;
- recommend that any person invest in the Securities offered hereby or any other securities;
- have any responsibility or liability for or make any decisions about the timing, amount, or pricing of the Securities;
- have any responsibility or liability for the administration, management, or marketing of the Securities; or
- consider the needs of the Securities or the holders of the Securities in determining, composing, or calculating the Underlying, or have any obligation to do so.

STOXX will not have any liability in connection with the Securities. Specifically:

- STOXX does not make any warranty, express or implied, and disclaims any and all warranty concerning:
  - the results to be obtained by the Securities, the holders of the Securities or any other person in connection with the use of the Underlying and the data included in the Underlying;
  - the accuracy or completeness of the Underlying and its data;
  - the merchantability and the fitness for a particular purpose or use of the Underlying and its data;
- STOXX will have no liability for any errors, omissions, or interruptions in the Underlying or its data; and

Under no circumstances will STOXX be liable for any lost profits or indirect, punitive, special, or consequential damages or losses, even if STOXX knows that they might occur.

The licensing agreement between us and STOXX is solely for their benefit and our benefit, and not for the benefit of the holders of the Securities or any

other third parties.

11

---

## Historical Information

The following table sets forth the quarterly high, low and period-end closing levels of the Underlying, as reported by Bloomberg Financial Markets. The historical performance of the Underlying should not be taken as an indication of its future performance. We cannot give you assurance that the performance of the Underlying will result in the return of any of your initial investment.

Quarter Begin	Quarter End	Quarterly Closing High	Quarterly Closing Low	Quarterly Period-End Close
1/1/2008	3/31/2008	4,339.23	3,431.82	3,628.06
4/1/2008	6/30/2008	3,882.28	3,340.27	3,352.81
7/1/2008	9/30/2008	3,445.66	3,000.83	3,038.20
10/1/2008	12/31/2008	3,113.82	2,165.91	2,447.62
1/1/2009	3/31/2009	2,578.43	1,809.98	2,071.13
4/1/2009	6/30/2009	2,537.35	2,097.57	2,401.69
7/1/2009	9/30/2009	2,899.12	2,281.47	2,872.63
10/1/2009	12/31/2009	2,992.08	2,712.30	2,964.96
1/1/2010	3/31/2010	3,017.85	2,631.64	2,931.16
4/1/2010	6/30/2010	3,012.65	2,488.50	2,573.32
7/1/2010	9/30/2010	2,827.27	2,507.83	2,747.90
10/1/2010	12/31/2010	2,890.64	2,650.99	2,792.82
1/1/2011	3/31/2011	3,068.00	2,721.24	2,910.91
4/1/2011	6/30/2011	3,011.25	2,715.88	2,848.53
7/1/2011	9/30/2011	2,875.67	1,995.01	2,179.66
10/1/2011	12/31/2011	2,476.92	2,090.25	2,316.55
1/1/2012	3/31/2012	2,608.42	2,286.45	2,477.28
4/1/2012	6/30/2012	2,501.18	2,068.66	2,264.72
7/1/2012	9/30/2012	2,594.56	2,151.54	2,454.26
10/1/2012	12/31/2012	2,659.95	2,427.32	2,635.93
1/1/2013	3/31/2013	2,749.27	2,570.52	2,624.02
4/1/2013	6/30/2013	2,835.87	2,511.83	2,602.59
7/1/2013	9/30/2013	2,936.20	2,570.76	2,893.15
10/1/2013	12/31/2013	3,111.37	2,902.12	3,109.00
1/1/2014	3/31/2014	3,172.43	2,962.49	3,161.60
4/1/2014	6/30/2014	3,314.80	3,091.52	3,228.24
7/1/2014	9/30/2014	3,289.75	3,006.83	3,225.93
10/1/2014	12/31/2014	3,277.38	2,874.65	3,146.43
1/1/2015	3/31/2015	3,731.35	3,007.91	3,697.38
4/1/2015	6/30/2015	3,828.78	3,424.30	3,424.30
7/1/2015	9/30/2015	3,686.58	3,019.34	3,100.67
10/1/2015	12/31/2015	3,506.45	3,069.05	3,267.52
1/1/2016	3/31/2016	3,178.01	2,680.35	3,004.93
4/1/2016	6/30/2016	3,151.69	2,697.44	2,864.74
7/1/2016	9/30/2016	3,091.66	2,761.37	3,002.24
10/1/2016	12/31/2016	3,290.52	2,954.53	3,290.52
1/1/2017	3/31/2017	3,500.93	3,230.68	3,500.93
4/1/2017	6/30/2017	3,658.79	3,409.78	3,441.88

7/1/2017	9/30/2017	3,594.85	3,388.22	3,594.85
10/1/2017	12/31/2017	3,697.40	3,503.96	3,503.96
1/1/2018	3/31/2018	3,672.29	3,278.72	3,361.50
4/1/2018	5/29/2018*	3,592.18	3,340.35	3,428.14

\* This document includes information for the second calendar quarter of 2018 for the period from April 2, 2018 through May 29, 2018. Accordingly, the “Quarterly Closing High,” “Quarterly Closing Low” and “Quarterly Period-End Close” data indicated are for this shortened period only and do not reflect complete data for the second calendar quarter of 2018.

12

---

The graph below illustrates the performance of the Underlying from May 29, 2008 to May 29, 2018. HISTORIC PERFORMANCE IS NOT AN INDICATION OF FUTURE PERFORMANCE.

Source: Bloomberg L.P. We have not independently verified the accuracy or completeness of the information obtained from Bloomberg Financial Markets.

13

---

Supplemental Plan of Distribution (Conflicts of Interest)

We have agreed to indemnify UBS and RBCCM against liabilities under the Securities Act of 1933, as amended, or to contribute payments that UBS and RBCCM may be required to make relating to these liabilities as described in the prospectus supplement and the prospectus. We have agreed that UBS may sell all or a part of the Securities that it will purchase from us to investors at the price to public listed on the cover hereof, or its affiliates at the price indicated on the cover of this pricing supplement.

UBS may allow a concession not in excess of the underwriting discount set forth on the cover of this pricing supplement to its affiliates for distribution of the Securities.

Subject to regulatory constraints and market conditions, RBCCM intends to offer to purchase the Securities in the secondary market, but it is not required to do so.

We or our affiliates may enter into swap agreements or related hedge transactions with one of our other affiliates or unaffiliated counterparties in connection with the sale of the Securities and RBCCM and/or an affiliate may earn additional income as a result of payments pursuant to the swap or related hedge transactions. See "Use of Proceeds and Hedging" on page PS-14 of the accompanying product prospectus supplement no. UBS EI STEPS. The value of the Securities shown on your account statement may be based on RBCCM's estimate of the value of the Securities if RBCCM or another of our affiliates were to make a market in the Securities (which it is not obligated to do). That estimate will be based upon the price that RBCCM may pay for the Securities in light of then prevailing market conditions, our creditworthiness and transaction costs. For a period of approximately 13 months after the issue date, the value of the Securities that may be shown on your account statement may be higher than RBCCM's estimated value of the Securities at that time. This is because the estimated value of the Securities will not include the underwriting discount and our hedging costs and profits; however, the value of the Securities shown on your account statement during that period may be a higher amount, potentially reflecting the addition of the underwriting discount and our estimated costs and profits from hedging

the Securities. Any such excess is expected to decrease over time until the end of this period. After this period, if RBCCM repurchases your Securities, it expects to do so at prices that reflect their estimated value. This period may be reduced at RBCCM's discretion based on a variety of factors, including but not limited to, the amount of the Securities that we repurchase and our negotiated arrangements from time to time with UBS. For additional information as to the relationship between us and RBCCM, please see the section entitled "Plan of Distribution—Conflicts of Interest" in the prospectus dated January 8, 2016.

No Prospectus (as defined in Directive 2003/71/EC (as amended, the "Prospectus Directive")) will be prepared in connection with these Securities. Accordingly, these Securities may not be offered to the public in any member state of the European Economic Area (the "EEA"), and any purchaser of these Securities who subsequently sells any of these Securities 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 Securities 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 Securities to be offered so as to enable an investor to decide to purchase or subscribe the Securities, 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 Securities or otherwise making them available to retail investors in the EEA has been prepared, and therefore, offering or selling the Securities or otherwise making them available to any retail investor in the EEA may be unlawful under the PRIIPs Regulation.

### Structuring the Securities

The Securities are our debt securities, the return on which is linked to the performance of the Underlying. As is the case for all of our debt securities, including our structured notes, the economic terms of the Securities 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 Securities 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 resulted in a higher initial estimated value of the Securities at the time their terms are set than if the secondary market rate was used. Unlike the estimated value included on the cover of this document, any value of the Securities determined for purposes of a secondary market transaction may be based on a different borrowing rate, which may result in a lower value for the Securities than if our initial internal borrowing rate were used.

In order to satisfy our payment obligations under the Securities, 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 Underlying, and the tenor of the Securities. The economic terms of the Securities 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 Securities to you. The initial offering price of the Securities also reflects the underwriting discount and our estimated hedging costs. These factors resulted in the initial estimated value for the Securities on the Trade Date being less than their public offering price. See “Key Risks—The Initial Estimated Value of the Securities Is Less than the Price to the Public” above.

Terms Incorporated in Master Note

The terms appearing above under the caption “Final Terms of the Securities” and the provisions in the accompanying product prospectus supplement no. UBS-EI-STEPS dated January 27, 2016 under the caption “General Terms of the Securities” are incorporated into the master note issued to DTC, the registered holder of the Securities. In addition to those terms, the following two sentences are also incorporated into the master note: RBC confirms that it fully understands and is able to calculate the effective annual rate of interest applicable to the Securities based on the methodology for calculating per annum rates provided for in the Securities. RBC irrevocably agrees not to plead or assert Section 4 of the Interest Act (Canada), whether by way of defense or otherwise, in any proceeding relating to the Securities.

14

---

Validity of the Securities

In the opinion of Norton Rose Fulbright Canada LLP, the issue and sale of the Securities has been duly authorized by all necessary corporate action of the Bank in conformity with the Indenture, and when the Securities have been duly executed, authenticated and issued in accordance with the Indenture and delivered against payment therefor, the Securities will be validly issued and, to the extent validity of the Securities is a matter governed by the laws of the Province of Ontario or Québec, or the laws of Canada applicable therein, and will be valid obligations of the Bank, subject to equitable remedies which may only be granted at the discretion of a court of competent authority, subject to applicable bankruptcy, to rights to indemnity and contribution under the Securities or the Indenture which may be limited by applicable law; to insolvency and other laws of general application affecting creditors' rights, to limitations under applicable limitations statutes, and to limitations as to the currency in which judgments in Canada may be rendered, as prescribed by the Currency Act (Canada). This opinion is given as of the date hereof and is limited to the laws of the Provinces of Ontario and Québec and the federal laws of Canada applicable thereto. In addition, this opinion is subject to customary assumptions about the Trustee's authorization, execution and delivery of the Indenture and the genuineness of signatures and certain factual matters, all as stated in the letter of such counsel dated January 8, 2016, which has been filed as Exhibit 5.1 to Royal Bank's Form 6-K filed with the SEC dated January 8, 2016.

In the opinion of Morrison & Foerster LLP, when the Securities have been duly completed in accordance with the Indenture and issued and sold as contemplated by the prospectus supplement and the prospectus, the Securities will be valid, binding and enforceable obligations of Royal Bank, entitled to the benefits of the Indenture, subject to applicable bankruptcy, insolvency and similar laws affecting creditors' rights generally, concepts of reasonableness and equitable principles of general applicability (including, without limitation, concepts of good faith, fair dealing and the lack of bad faith). This opinion is given as of the date hereof and is limited to the laws of the State of New York. This opinion is subject to customary assumptions about the Trustee's authorization,

execution and delivery of the Indenture and the genuineness of signatures and to such counsel's reliance on the Bank and other sources as to certain factual matters, all as stated in the legal opinion dated January 8, 2016, which has been filed as Exhibit 5.2 to the Bank's Form 6-K dated January 8, 2016.

15

---