1. Product description

Product Category/Name
Mini-Future (2210, according to the Swiss Derivative Map of January 2019 provided by the Swiss Structured Products Association)

CISA Notification
These Derivatives do not constitute a collective investment scheme within the meaning of the Swiss Federal Act on Collective Investment Schemes (CISA) and are not subject to authorisation or supervision by FINMA. The issuer risk is borne by investors.

Key Elements of the Product
ZKB Mini-Futures enable a disproportionate participation in the price development of the Underlying corresponding to the Leverage. ZKB Mini-Futures Short benefit from falling prices of the Underlying. ZKB Mini-Futures Short do not have a fixed term, but have a Stop-Loss Level, which is adjusted daily or periodically. Upon reaching the Stop-Loss Level the ZKB Mini-Future Short expires immediately and any realisable residual value is repaid to the investor. A daily interest rate consisting of a Money Market Interest Rate and a Financing Spread is offset against the leveraged capital in the amount of the Financing Level provided by the Issuer. Any investment income from the Underlying will be deducted from the Financing Level.

Issuer
Zürcher Kantonalbank, Zürich

Rating of the Issuer
Standard & Poor's AAA, Moody's Aaa, Fitch AAA

Lead Manager, Paying Agent, Exercise and Calculation Agent
Zürcher Kantonalbank, Zürich

Symbol/Swiss Security Code/ISIN
ISLACZ / 44 780 457 / CH0447804573

Underlying
Swiss Life Holding AG registered share
ISIN: CH0014852781
Swiss Security Code: 1 485 278
Bloomberg: SLHN SE EQUITY
Domicile: Switzerland
Trading venue/Price source: SIX Swiss Exchange

Underlying's Spot Reference Price
CHF 490.20

Ratio
40 : 1; 40 ZKB Mini-Futures per Underlying

Reference Currency
CHF

Issue Price
CHF 1.51 (issue surcharge of CHF 0.01 resp. 0.66%)

Issue Volume
Up to 1’000’000 ZKB Mini-Futures Short, with the right to increase
Financing Level at Initial Fixing
CHF 550.00

Stop-Loss Level at Initial Fixing
CHF 533.50

Initial Fixing Date
October 18, 2019

First Trading Date
October 21, 2019

Payment Date
October 22, 2019

Term
Open End

Initial Financing Spread
3.00%

Maximum Financing Spread
5.00%

Initial Stop-Loss Buffer
3.00%

Maximum Stop-Loss Buffer
15.00%

Rounding of the Financing Level
0.0001

Rounding of the Stop-Loss Level
0.0001

Observation Period
Continuous monitoring from Initial Fixing

Initial Leverage
8.20 (Spot Reference Price of the Underlying, divided by Ratio, divided by Issue Price)

Current Financing Level
At the end of each adjustment day, the Financing Level is adjusted by offsetting the interest and debiting any investment income of the Underlying. The Current Financing Level is determined by the Calculation Agent using the following formula:

\[ FL_E = FL_A + \left( (r - FS) \cdot FL_A \cdot \frac{n}{360} \right) - SF \cdot DIV \]

where
- \( FL_A \): Financing Level before adjustment
- \( FL_E \): Financing Level after adjustment
- \( FS \): Current Financing Spread
- \( r \): Money Market Interest Rate
- \( n \): Number of calendar days between the Current Adjustment Day (exclusive) and the next Adjustment Day (inclusive)
- \( SF \): Tax factor for any investment income such as dividends. The tax factor is in the range between zero and one and is determined by the calculation agent.
- \( DIV \): Dividends and other investment income of the Underlying since the last adjustment

The result of the calculation is rounded up to the nearest multiple according to the rounding of the Financing Level.

Adjustment Dates
Every trading day of the Mini-Future

Trading and Execution Units
1 Mini-Future or a multiple thereof

Money Market Interest Rate
The current Money Market Interest Rate determined by the Calculation Agent for overnight deposits in CHF

Financing Spread
A value determined by the Calculation Agent on each Adjustment Day which is at least zero and at most equals to the Maximum Financing Spread.
**Stop-Loss Event**
A Stop-Loss Event occurs, if the price of the Underlying touches or exceeds the Current Stop-Loss Level during the Underlying's trading hours. In this case, the Mini-Futures are considered automatically exercised and expired.

**Current Stop-Loss Level**
The Current Stop-Loss Level is determined by the Calculation Agent on each Stop-Loss Level Fixing Date, after the Financing Level has been adjusted, according to the following formula:

\[
FL \cdot (100\% - \text{Stop-Loss Buffer})
\]

where

- \(FL\): Current Financing Level

The result of the calculation is rounded down to the next multiple of the rounding of the Stop-Loss Level.

**Stop-Loss Level Fixing Dates**
Each first banking day of the month, each ex-dividend-day of the Underlying, and, at the discretion of the Issuer, each banking day on which the Issuer deems it necessary to adjust the Stop-Loss Level.

**Stop-Loss Buffer**
A value determined by the Calculation Agent on each Stop-Loss Level Fixation Day that is equal to or greater than zero and equal to or less than the Maximum Stop-Loss Buffer.

**Stop-Loss Liquidation Price**
A price for the relevant Underlying determined by the Payment Agent and Calculation Agent within a period of one hour during the trading hours of the Certificate following the occurrence of the Stop-Loss Event. If a Stop-Loss Event occurs less than one hour before the end of any trading period, the period will be extended to the next trading day. The Stop-Loss Liquidation Price may deviate significantly from the Stop-Loss Level.

**Investor Put Option**
From the first trading day of the ZKB Mini-Futures Short, the investor has the right to exercise his ZKB Mini-Futures Short on this and any subsequent trading day - subject to the occurrence of a stop-loss event - or to demand payment of the corresponding redemption amount. The corresponding written exercise declaration must be received by the exercise office by 11.00h a.m. CET at the latest.

**Issuer Call Option**
The Issuer is entitled at any time, without giving reasons, to cancel unexercised ZKB Mini-Futures Short, for the first time 3 months after the First Trading Day.

**Final Fixing Date**
The trading day on which a Stop-Loss Event occurs, the Mini-Futures are cancelled by the Issuer or exercised by the investor. The occurrence of a Stop-Loss Event takes precedence over termination or exercise.

**Repayment Amount on Exercise, Termination or Stop-Loss Event**
Per ZKB Mini-Future Short, an amount calculated according to the following formula in the Reference Currency will be paid out upon the occurrence of a Stop-Loss Event, upon exercise by the investor or upon redemption by the Issuer:

\[
\max \left( 0, \frac{FL_t - \text{Underlying}_t}{\text{Ratio}} \right)
\]

where

- \(FL_t\): Financing level on Final Fixing Date \(t\)
- \(\text{Underlying}_t\): Closing price of the Underlying on Final Fixing Date \(t\). In case of a Stop-Loss Event the price of the Underlying corresponds to the Stop-Loss Liquidation Price determined by the Paying and Calculation Agent.

The repayment will be made 5 banking days after the Final Fixing Day.

**Listing**
Application to list on the SIX Swiss Exchange will be filed, the first provisory trading day will be October 21, 2019.

**Secondary market/Tradability**
The Issuer intends (without legal obligation), under normal market conditions, to constantly provide indicative bid and offer prices for this Product during continuous trading. Actual bid/offer prices are available on [https://zkb-finance.mdgms.com/products/warrants/index.html](https://zkb-finance.mdgms.com/products/warrants/index.html) and on SIX Swiss Exchange.
Taxes

Any profits or losses arising from ZKB Mini-Future Short are considered capital gains or losses for private investors domiciled in Switzerland for tax purposes and are therefore not subject to income tax. The Federal securities transfer stamp tax is not levied on secondary market transactions. The product is not subject to federal withholding tax. The product may be subject to further withholding taxes or duties, in particular under the rules of FATCA or Sect. 871(m) U.S. Tax Code or foreign financial transaction taxes. All payments from this product are made after deduction of any withholding taxes and levies.

The information above is a summary only of the Issuer's understanding of current law and practice in Switzerland relating to the taxation of derivatives. The relevant tax law and practice may change. The Issuer does not assume any liability in connection with the above information. The tax information only provides a general overview and can not substitute the personal tax advice to the investor.

Documentation

This document constitutes the Final Terms in accordance to article 21 of the Additional Rules for the Listing of Derivatives of the SIX Swiss Exchange. These Final Terms supplement the Issuance Programme of the Issuer dated April 15, 2019 and published in German in the currently valid version. These Final Terms and the Issuance Programme constitute the complete Issue and Listing Prospectus for this issuance (the 'Listing Prospectus'). Except as otherwise defined in these Final Terms, capitalised terms used in these Final Terms have the meaning as defined in the Glossary in the Issuance Programme. In case of discrepancies between information or the provisions in these Final Terms and those in the Issuance Programme, the information and provisions in these Final Terms shall prevail. ZKB Mini-Future Short will be issued as uncertified rights (Wertrechte) and registered as book entry securities (Bucheffekten) with SIX SIS AG. Investors have no right to require the issuance of any certificates or proves of evidence.

These Final Terms and the Issuance Programme can be ordered free of charge at Zürcher Kantonalbank, Bahnhofstrasse 9, 8001 Zurich, dept. VRIE or by e-mail at documentation@zkb.ch. This document is not a prospectus in accordance with articles 652a or 1156 of the Swiss Code of Obligations.

Information on the Underlying

Information on the performance of the Underlying is publicly available on www.bloomberg.com. Current annual reports are published on the website of the respective business entity.

Notifications

Any notice by the Issuer in connection with this product, in particular any notice in connection with modifications of the terms and conditions will be validly published on the website https://zkb-finance.mdgms.com/products/warrants/index.html to the corresponding product. The Swiss security code search button will lead you directly to the relevant product. The notices will be published in accordance with the rules issued by SIX Swiss Exchange for IBL (Internet Based Listing) on the website https://www.six-exchange-regulation.com/de/home/publications/official-notices.html.

Governing Law/Jurisdiction

Swiss Law/Zurich

2. Profit and Loss Expectations at Maturity

ZKB Mini-Futures Short offer the opportunity to benefit disproportionately from a negative performance of the Underlying. The potential loss of ZKB Mini-Futures Short is limited to the capital invested. ZKB Mini-Futures Short are Derivatives whose risk is correspondingly greater than the risk of the Underlying due to the leverage effect.

In the event of a Stop-Loss Event, the actual execution price of the closing out of the ZKB Mini-Future Short may diverge sharply from the Current Stop-Loss Level, which is only to be seen as the trigger of a Stop-Loss Event, not as an actual indication of the Redemption Amount of the certificate that can be effectively reached.

3. Material Risks for Investors

Issuer Risk

Obligations under these Derivatives constitute direct, unconditional and unsecured obligations of the Issuer and rank pari passu with other direct, unconditional and unsecured obligations of the Issuer. The value of the Derivatives does not only depend on the performance of the Underlying and other developments in the financial markets, but also on the solvency of the Issuer, which may change during the term of this series of Derivatives.
Specific Product Risks  
ZKB Mini-Futures Short involve the risk of losing the entire capital initially paid (the Issue Price). They are meant only for experienced investors who understand the associated risks and can bear them. ZKB Mini-Futures Short do not generate continuous income; ZKB Mini-Futures Short generally lose value if there is no price decrease of the Underlying or if the price of the Underlying remains constant. ZKB Mini-Futures Short are investment products whose risk is greater than a direct investment in the Underlying due to the Leverage effect.

4. Additional Terms

Modifications  
If an extraordinary event as described in Section IV of the Issuance Programme occurs in relation to the Underlying/a component of the Underlying or if any other extraordinary event occurs, which makes it impossible or particularly cumbersome for the Issuer, to fulfill its obligations under the Structured Products or to calculate the value of the Structured Products, the Issuer shall at its own discretion take all the necessary actions and, if necessary may modify the terms and conditions of these Structured Products at its own discretion in such way, that the economic value of the Structured Products after occurrence of the extraordinary event corresponds, to the extent possible, to the economic value of the Structured Products prior to the occurrence of the extraordinary event. Specific modification rules for certain types of Underlyings stated in Section IV of the Issuance Programme shall prevail. If the Issuer determines, for whatever reason, that an adequate modification is not possible, the Issuer has the right to redeem the Structured Products early.

Market Disruptions  
See the comments in the issuance program

Selling Restrictions  
The selling restrictions contained in the Issuance Programme are applicable (EEA, U.S.A./U.S. persons, United Kingdom, Guernsey).

Prudential Supervision  
Zürcher Kantonalbank is a bank according to the Swiss Federal Act on Banks and Saving Institutions (BankG; SR 952.0) and a securities dealer according to the Swiss Federal Act on Securities Exchanges and Securities Trading (BEHG; SR 954.1) and subject to the prudential supervision of the FINMA, Laupenstrasse 27, CH-3003 Bern, http://www.finma.ch.

Recording of Telephone Conversations  
Investors are reminded, that telephone conversations with trading or sales units of the Zürcher Kantonalbank are recorded. Investors, who have telephone conversations with these units consent tacitly to the recording.

Further Information  
This document constitutes neither an offer nor a recommendation or invitation to purchase financial instruments and can't replace the individual investor's own judgement. The information contained in this document does not constitute investment advice but is intended solely as a product description. An investment decision should in any case be made on the basis of these Final Terms and the issuance programme. Particularly, before entering into a transaction, the investor should, if necessary with the assistance of an advisor, examine the conditions for investment in the Product in consideration of his personal situation with regard to legal, regulatory, tax and other consequences. Only an investor who is aware of the risks of the transaction and has the financial capacity to bear any losses should enter into such transactions.

Zurich, October 18, 2019