

Risk Disclosure Trading and Custody of Cryptocurrencies (September 2023)

1 Purpose

This Cryptocurrency Risk Disclosure (“Risk Disclosure”) provides an overview of various risks associated with cryptocurrencies to the extent that they may become relevant to the Customer in connection with its business relationship with the Bank. They do not constitute an exhaustive list or description of all risks associated with cryptocurrencies and the underlying distributed ledger and blockchain technologies (collectively “Blockchain”).

2 Risks

The investment, trading, settlement and holding of cryptocurrencies involves specific risks for the client. These risks may differ from the risks of traditional financial instruments, other currencies and traditional asset classes.

2.1 Technology Risks

2.1.1 Dependence on DLT Technology

Cryptocurrencies are based on distributed ledger technology (DLT), a generic term for decentralised technologies such as the blockchain. This creates a dependency for the bank on external entities in the decentralised network that cannot be influenced by the bank.

2.1.2 Programming Errors, Security Vulnerabilities

Programming errors, security vulnerabilities
The infrastructures, systems and software underlying cryptocurrencies, including smart contracts, may be exposed to the risk of programming errors, bugs and other security vulnerabilities that cannot be influenced by the Bank due to the decentralised structure. Cryptocurrencies are often based on technologies programmed with open-source software that are publicly accessible and thus security vulnerabilities can be exploited by third parties.

2.1.3 Adjustments to the Cryptocurrencies

Cryptocurrencies can be adapted at any time to improve certain functionalities, security aspects or other properties. These adjustments can be made by updating the technology platform, a consensus mechanism or by introducing new protocols. The Bank has no influence on these adjustments.

2.1.4 Technological Developments

The underlying DLT and blockchain technologies are comparatively new, making unforeseen technological developments possible.

2.1.5 Forks, Airdrops and Similar Events

Cryptocurrencies are subject to technology-specific and other peculiarities, limitations and developments, such as hard or soft forks, which may impair the functionality, convertibility or transferability of the cryptocurrencies. This may also lead to a complete loss or reduction in the value of the cryptocurrency.

2.1.6 Hacking Attacks/Fraud Attempts

Cryptocurrencies can be vulnerable to various cybersecurity risks, including hacking attacks and fraud attempts such as data and identity theft, phishing or malware and ransomware. Hackers and cybercriminals may attempt to gain unauthorised access to private keys, wallets or systems, resulting in potential theft of cryptocurrencies or manipulation of transactions.

2.1.7 Irrevocability of Transactions

Once a transaction with cryptocurrencies is confirmed and recorded in the blockchain, it is considered final. Once sent, transactions cannot be reversed, and erroneous or fraudulent transactions can lead to financial losses.

2.2 Market Risks

2.2.1 No intrinsic Value

Unlike traditional currencies, financial instruments or commodities, cryptocurrencies have no intrinsic value. Cryptocurrencies do not represent assets such as shares in real assets, companies or earnings. In addition, due to the decentralised nature of some cryptocurrencies, there is no counterparty to guarantee the fulfilment of obligations.

The service does not include any right of the customer to transfer cryptocurrencies to the bank or to have them delivered by the bank, which is why they cannot be used as a means of payment.

2.2.2 Lack of Objective Evaluation

Objective valuation of cryptocurrencies can be difficult as there are no recognised standard metrics or valuation models for doing so. The lack of a clear valuation basis can make it difficult to determine the actual value of a cryptocurrency, which increases the risk of over- or undervalued investments.

2.2.3 Unpredictable Price Formation (Price Volatility, Correlations, external Factors)

Cryptocurrencies may exhibit valuation fluctuations that do not follow predictable patterns or established pricing mechanisms in traditional financial instruments. In addition, cryptocurrencies may correlate with each other, meaning that they exhibit similar price movements. If a particular cryptocurrency is affected by negative events or market conditions, this can lead to a contagion effect in which other cryptocurrencies also fall sharply in value. Events outside cryptocurrencies can also cause cryptocurrencies to lose value.

2.2.4 Illiquidity

Cryptocurrencies may have limited or no market liquidity. In such cases, the Client may not be able to place orders and sell open positions. Low liquidity increases the risk of rapid price movements, unusually large spreads (i.e. the difference between buy and sell prices) and the rejection of orders.

2.3 Legal, Regulatory and Tax Risks

2.3.1 Legal uncertainties/Lack of Regulation of Cryptocurrencies

With regard to cryptocurrencies and the taxation of the corresponding services, clear regulation may be lacking or even completely absent. Furthermore, there is no uniform international regulation or taxation of cryptocurrencies. This can lead to considerable uncertainty regarding the legal, regulatory and tax qualification of cryptocurrencies.

National and international regulatory and tax authorities and policy makers may, at their discretion and independently, change the applicable regulations for cryptocurrencies and the taxation of the corresponding services. Amended laws or regulations may even prohibit transactions with cryptocurrencies or the provision of corresponding services. This may lead to significant market disruptions and losses for the customer.

2.3.2 Lack of Investor Protection

Cryptocurrencies are considered neither financial instruments nor securities (e.g. those within the meaning of the Financial Services Act or the Financial Market Infrastructure Act).

As a result, the investor protection provisions applicable to financial instruments or securities, in particular the obligation to conduct a suitability and appropriateness test, are not applicable to the Bank's offer to trade cryptocurrencies. The market

organisation provisions as well as the conduct provisions for the prevention and detection of inadmissible market conduct, the transparency and reporting obligations of the stock exchange law also do not apply.

2.3.3 Lack of Central Governance

Cryptocurrencies are usually supported by decentralised networks, which means that there is no central institution controlling or regulating the development and use of the cryptocurrency. This lack of central governance can lead to risks, especially in the case of software upgrades to the corresponding blockchain. There is also a risk that the proper operation and maintenance of the blockchain could be discontinued.

2.3.4 Misleading Statements regarding Cryptocurrencies

Since cryptocurrencies are not regulated as financial instruments, there is a lack of customer protection regulations and supervision to prevent misleading statements, especially false promises of profits.

2.4 Risks in Relation to Trading in Cryptocurrencies

2.4.1 Delayed Processing/Rejection of Client Orders

The processing of transactions may be delayed or the placement, execution, confirmation and/or cancellation of orders may become invalid due to an error in the transaction or trading systems or in the communication channels between the Bank and the Client.

2.4.2 Limited Application of Execution Policies

The execution of orders in cryptocurrencies is not subject to the Bank's execution principles and execution venues. For the client, this may mean that the prices charged to him do not always correspond to the best achievable price (no applicability of best execution).

2.4.3 Restricted Trading Hours

The trading hours for trading in cryptocurrencies via the Bank may be restricted, namely due to technical problems or adjustments to the systems.

2.4.4 Dependence on external Brokers

The execution of client orders through an external broker is subject to the terms and conditions of the respective broker, including transaction execution details such as trading hours, possible changes and/or rejections of transactions, confirmations regarding market prices and trades as well as compliance with local legal and regulatory requirements.

In addition, there are counterparty risks (namely in the event of bankruptcy or insolvency), dependency risks (namely of an operational nature), risks of restriction of opportunities to act, concentration risks and risks of conflicts of interest.

2.4.5 Suspension of Trading in the Event of Market Distortions

In the event of market distortions, for example in the event of strong price fluctuations or systemic risks, it is possible that trading in cryptocurrencies may be temporarily suspended. This can lead to liquidity shortages and make it difficult for customers to sell or buy their positions, which can lead to financial losses.

2.5 Lack of Sustainability and Environmental Impact

The mining of cryptocurrencies in particular currently requires significant amounts of computing power, which leads to an increase in CO₂ emissions.

3 Changes

The bank has the right to change this risk disclosure at any time. Changes to the risk disclosure do not require prior notice by the Bank.

The risk disclosure is published on zkb.ch/cryptocurrencies and can be obtained from the bank.

4 Glossary

Airdrop

An airdrop is a marketing strategy in which a cryptocurrency/token is distributed free of charge to a large number of wallet addresses.

Blockchain

A blockchain is a decentralised and distributed database that stores a list of transactions in blocks. Each block is linked to the previous block by a cryptographic hash, creating an immutable and transparent record of transactions.

DLT (Distributed-Ledger Technology)

Distributed ledger technology is an umbrella term for technologies that enable a decentralised and distributed record of transactions. The blockchain is a form of DLT.

Forks

A fork occurs when a cryptocurrency/token or protocol is split into two separate versions because the developer community disagrees on future development. There are two main types of forks: hard forks and soft forks.

- a) Hard fork: A hard fork is a significant change to the protocol of a cryptocurrency/token where the new rules are not compatible with the old ones. This creates a new and separate blockchain.
- b) Soft fork: A soft fork is a backwards-compatible change to the protocol of a cryptocurrency/token in which the new rules are compatible with the old ones. No new blockchain is created, but the new version is backwards compatible.

Hacking

Hacking, refers to unauthorised and illegal activities in which a person or group of persons attempt to gain unauthorised access to computer systems, networks, software or data.

Open-source software

Open-source software is a type of software where the source code is freely accessible, viewable and modifiable.

Smart contract

A smart contract is a self-executable contract based on blockchain technology. It is a code that contains predefined conditions and is automatically executed when these conditions are met.

Private Keys

Private keys are cryptographic keys used to sign transactions in a cryptocurrency/token. They serve as proof of ownership of a wallet and must be kept secret, as access to them allows access to the cryptocurrencies/tokens they contain.

Wallet

A wallet is a software application or device used to manage and transfer cryptocurrencies/tokens. A wallet contains the private keys required to access the cryptocurrencies in the wallet.