CoinDCX

DCX Futures

September 2021

Legal and Compliance

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A. Overview

1. A derivative is a financial contract with a value that is derived from an underlying asset. Derivatives have no direct value in and of themselves -- their value is based on the expected price movements of their underlying asset. When the underlying asset is a cryptocurrency like Bitcoin, they are termed as Cryptocurrency Derivatives. Trading Crypto derivatives doesn't actually mean buying or selling cryptocurrencies. It provides an alternative path to get exposure to the underlying cryptocurrency.

2. Derivatives are often used as an instrument to manage financial risk at the expense of high returns for the other party. Future is one type of derivative.

3. Futures are contracts that facilitate the buying or selling of an underlying asset at a predetermined price at a future point in time. Counterparties are obligated to fulfil the terms of the contract, either buying or selling the asset at the decided price on the date of expiry.

B. What are Cryptocurrency Futures?

1. The contracts are still settled at the predetermined price. Crypto futures allow a user to speculatively trade on the future prices of cryptocurrencies without owning the cryptocurrencies. When two parties enter into a crypto futures contract, they agree to buy/sell an asset or security at a pre-fixed price on a selected date in the future. The price of Cryptocurrency futures is directly proportional to the prices of the underlying cryptocurrencies. Users of CoinDCX can trade both Bitcoin and Altcoin futures on the platform.

C. Benefits:

1. Hedging and better risk management
2. Low Transaction costs
3. Exposure: Traders can bet against an asset's performance without owning it.
4. Leverage: Traders can enter positions that are larger than their account balance.
5. Cryptocurrency Futures are always superior to margin trading because futures provide much higher leverage than the maximum leverage allowed in Margin trading. On CoinDCX, Cryptocurrency futures can be leveraged to as high as 15x whereas margin trading is capped to 5x.
6. Margin trading is a borrowing market which is hard to build, and as a result, has lower liquidity. Future markets are more liquid than spot markets since they are free of this limitation and are easy to develop.

7. The futures contract will either trade at a premium or discount. There are no costs of interest involved in holding the futures. In the case of margin trading, CoinDCX offers interest-free margin trading for the first 1 hour and charges 0.05% per day thereafter.

D. CoinDCX - India's first Crypto Derivative Exchange

1. CoinDCX is India's first cryptocurrency derivative exchange which offers immense liquidity on its Bitcoin and Altcoin future products. CoinDCX allows its users to trade cryptocurrency futures with up to 20x leverage. Maximum leverage limit for every futures contract can be found under the contract details section on the trading terminal.

E. Future Trading on CoinDCX

1. CoinDCX has future trading on Bitcoin and 8 leading Altcoins. These are Ether (ETH), XRP (XRP), Bitcoin Cash (BCH), Litecoin (LTC), Eos (EOS), Cardano (ADA), and Tron (TRX). Users can also trade perpetual future contracts with Bitcoin and Ethereum perpetual futures.

F. Eligibility and Processing Flow

1. Users may signup or login with your existing account on CoinDCX platform to avail DCXfutures.
2. CoinDCX will assist the user at every step including user's complete onboarding and KYC Verification.
3. Once the user's KYC is approved CoinDCX team will set up the user's account.
4. Users shall be required to deposit cryptocurrency in CoinDCX exchange wallets which will act as users' locked balance or user's existing portfolio can also be used.
5. To place a trade, user need to:
   a. Select the contract user is interested in
   b. Recall that futures contracts on CoinDCX are margined and settled in either BTC or USDT. If the user is looking to trade a USDT settled contract, the user could use the currency converter tool to change BTC to USDT.
   c. Specify the number of contracts that user is looking to buy/ sell
   d. Decide on the order type (e.g. limit or market) and place it
   e. Once an order is placed, it will immediately show up in the 'Open Orders' tab in the Balances panel. On execution of the order the user shall acquire a new 'Open position' which is displayed in the Balances panel.
   f. Note: Trading derivatives is more involved and quite different from spot buying and selling of cryptocurrencies. The mechanics of margin, calculation of PnL, details of contract settlement

may not always be obvious and we'd encourage you to browse through the Tutorials section as well as the rest of the documentation.

G. Guide to Futures Contract

1. Position Marking: The long and short positions on contracts are employed using the Last Price Marking method.

2. Last Price: Last price is the price at which the last trade has occurred right before the time of contract expiration. Last Price Marking ensures that the contract is settled closest to the spot market price. It minimizes the price discrepancy and ensures a fairer trading environment.

3. On CoinDCX's platform, the liquidation of the contract is executed based on the last price. This choice brings more flexibility and power in the hands of the traders to adapt based on their risk tolerance and market conditions. We will consider simple LTC-BTC Linear futures as an example to understand how futures work.

H. Glossary

1. Long Position: A buyer of futures contracts. A long position is the number of purchase contracts held by the buyer.
2. Short Position: A seller of futures contracts. A short position is the number of sales contracts held by the seller.
3. Underlying Currency: This is the cryptocurrency over which a Futures contract is defined. In our example the underlying is LTC.
4. Quote currency: This is the currency in which the price of the underlying in quoted. In our example, the price of LTC is quoted in BTC terms. Hence, quote currency is BTC.
5. Base currency/Settlement Currency: This is the currency in which the PnL of a Futures position is calculated. In our example, the base currency is the same as the quote currency, i.e. LTC. However, this need not always be true.
6. Closing Price: The fair value price trading near the end of the trading session.
7. Contract Size (m): The amount or quantity of the commodity or cryptocurrency represented by each futures contract.
8. Contract Value: The current price of the futures contract multiplied by the contract size.
9. Basis: The differential between the current price of the cryptocurrency and its nearby futures price.
10. Locked Margin (L%): Locked Margin is the amount which you will lock in the exchange to open a leveraged position and keep trading position open. If the losses on your positions increase more than the Locked Margin, the exchange will liquidate your positions to recover the losses.

11. PnL: PnL stands for profit and loss. When you have open positions on a futures market and it is susceptible to change based on market conditions, we call the PnL is unrealized. When you close your positions, the unrealized PnL becomes realized PnL (either partially or entirely).

I. Liquidation

1. Liquidation occurs when the value of the collateral falls below the Locked Margin.

2. Now, if you buy 'n' LTC-BTC future contracts, for a future price 'f',

3. Then your overall position size = n*m*f

4. This means that the buyer of the Futures contract has agreed to buy n*m BTC at contract expiry, with each LTC priced at f BTC. Thus, at the time of settlement, he needs to have n*m*f BTC to complete the contract.

5. However, you don't need to have resources equal to the position size to execute the contract. This is exactly where CoinDCX's leverage feature kicks in:

J. Leverage Explained:

1. Leverage has the potential to multiply your trading returns We defined the Locked Margin (L%) above. So, in our example, to buy/ sell n LTC-BTC contracts, you need to have only:

   n*m*L%*f (in BTC)

2. In your account, This also means that the maximum position size that you can afford is 1/(L%) times the collateral (in USD) that you have available.To understand the potential, we will consider two scenarios for traders, one with leverage and one without leverage.

3. Suppose you have 7000 INR which can help you buy 0.01 BTC when the price of BTC is 7,00,000 INR. In a week, BTC's price rises by 10% currently trading at 7,70,000 INR. Your Profit is Rs 700.

K. No Leverage:

RoI = 700/7000 = 10%

L. Leverage:

1. You deposit 7000 INR in the deposit margin.
2. Let's assume the Locked Margin (L%) = 10% and the contract size is 0.01BTC. The number of contracts you can afford to buy = 1/10% = 10. You bought 10 INR-BTC contracts:
3. PnL = 10*0.01*(7,70,000 - 7,00,000) = 7000 INR
4. ROI = 7000/7000 = 100%
5. Note - Leverage has a multiplier effect on profits as well as losses. If your losses exceed the amount you have deposited in your Locked Margin account, the exchange will give you a margin call or will liquidate your positions to compensate for the losses.

M. PnL Calculation for Futures:

1. Unrealised PnL For a long position in a Futures contract:

   PnL = n*m*(Future Current Price - Future Entry Price) (in BTC)

   For a short position in a Futures contract:

   PnL = -n*m*(Future Current Price - Future Entry Price) (in BTC)

2. It is worth noting that your Unrealized profits and losses are adjusted from the locked margin you post. Profit on a Futures position adds to the Margin (Locked Balance). Conversely, loss is subtracted from the locked margin and you might need to top it up to continue holding your position.
3. Settlement price is determined at the maturity of the contract through a pre-defined method described in the contract specifications . All open positions at the time of contract maturity are closed at the settlement price.

N. Realised PnL

1. In case of Futures, PnL can be realised either by exiting the position in the market or via settlement process at the maturity of the contract

2. For a long position in a Futures contract:

   PnL = n*m*(Future Current Price - Future Entry Price) (in BTC)

3. Exit long position via settlement:

   PnL = n*m*(Future Current Price - Future Entry Price) (in BTC)

4. Exit short position in market:

   PnL = n*m*(Future Current Price - Future Entry Price) (in BTC)

5. Exit short position via settlement:

   PnL = n*m*(Future Current Price - Future Entry Price) (in BTC)

O. Inverse Futures

1. The Futures contracts discussed above are also known as Vanilla Futures. Inverse Futures are similar to Vanilla Futures, but only with one key distinction: the relationship between Futures price and position PnL is inverted.

2. For a long position in an inverse Futures contract:

   PnL = n*m*(Future Current Price - Future Entry Price) (in BTC)

3. For a short position in an inverse Futures contract:

   PnL = n*m*(Future Current Price - Future Entry Price) (in BTC)

P. Guide to Perpetual Contracts

1. Overview
   a. Perpetual contracts are similar to futures but without any expiration date. However, the power to hold the contract forever comes at an expense. This expense is decided based on 'Funding'. Perpetual Contracts are marked according to the Last Price Marking method. The Last Price determines Unrealised PnL and liquidation prices.

2. Benefits of a perpetual contracts vs. futures
   a. Since a futures contract has an expiry date, a trader looking to maintain his position will need to periodically roll to a next contract as the previous one expires. Perpetual contracts eliminate the

need to roll positions. Perpetual contracts are an easy-to-go solution for regular traders.

b. The bases, i.e. the difference between the price of a futures and its underlying is higher compared to perpetuals. This exposes futures traders to basis risk.

3. Funding:
   a. Fundings are periodic payments exchanged between the buyer and seller every 8 hours. If the rate is positive, then longs will pay and shorts will receive the rate, and vice versa if the rate is negative. It brings the price of the perpetual contract back to the spot.
   b. When the Funding Rate is positive (perpetual contract trades at a premium to spot), longs pay shorts. When it is negative (perpetual contract trades at discount to spot), shorts pay longs.
   c. Note - You will only pay or receive funding if you hold a position at the Funding Timestamp. Funding Timestamps: 09:30 IST, 17:30 IST and 1:30 IST.
   d. Your position value is irrespective of leverage. For example, if you hold 100 BTC-USD contracts, funding is charged/received on the notional value of those contracts, and is not based on how much margin you have assigned to the position.

4. Funding Rate
   a. The Funding Rate consists of two main parts: the Interest Rate and the Premium / Discount. This rate aims to keep the traded price of the perpetual contract in line with the underlying reference price.

5. Interest Rate Component
   a. Every contract consists of two instruments: a Base currency and a Quote currency. For example, on BTC-USD, the Base currency is BTC while the quote currency is USD. The Interest Rate is a function of interest rates between these two currencies:
      i. Interest Rate (I) = (Interest Quote Index - Interest Base Index) / Funding Interval where
      ii. Interest Base Index = The Interest Rate for borrowing the Base currency
      iii. Interest Quote Index = The Interest Rate for borrowing the Quote currency
      iv. Funding Interval = 3 (Since funding occurs every 8 hours)
   b. Premium / Discount Component: The perpetual contract may trade at a significant premium or discount to the Last Price. In those situations, a Premium Index will be used to raise or lower the next Funding Rate to levels consistent with where the contract is trading. Each contract's Premium Index is available on the specific instrument's Contract Specifications page and is calculated as follows:
   c. Note: CoinDCX doesn't charge any funding fees from its users. There is no interest rate on keeping the position open indefinitely in perpetuity. The payments are directly interchanged between the buyer and the seller.

6. PnL Calculation
   a. In crypto derivatives, there are two types of PnLs, realized and unrealized. Particularly in perpetual contracts, When you have open positions and it is susceptible to change based on market conditions, we call the PnL is unrealized. When you close your positions, the unrealized

PnL becomes realized PnL (either partially or entirely). Here we will discuss how the unrealized and realized PnLs are calculated:

b. Example 1, Buying and Selling

7. Perpetual Contracts ; Suppose you are long 1,000 BTC-USD contracts with an average entry price of $1,000. The last price of BTC-USD is currently $1,250. Your unrealised PnL is based on the difference between his average entry price and the current price. Unrealised Profit = ($1/$1,000 - $1/$1,250) * 1,000 = 0.20 BTC Now, the last price of BTC-USD is $1,500.
   a. You decide to sell 500 BTCUSD contracts at $1,500 and realise some profit. Your realised PnL is based on the difference between his average entry price and the price at which you sell BTC-USD contracts. Realised Profit = ($1/1,000 - $1/$1,500) * 500 = 0.17 BTC
   b. Realised PNL: is based on where you can actually buy or sell your position, which in most cases is not the mark price. If Ram had sold his 500 contracts at the lost price of $1,250, he would have a realised profit of 0.10 BTC.
   c. Example 2, Funding Fees: Suppose you are trading a BTC-USD perpetual contract. Every 8 hours, there is a funding fee. The funding fee is currently 1%, and is paid from buyers to sellers.
   d. You currently long 100 BTC worth of BTC-USD contracts. The position has no realised PnL. It is funding time and you must pay 1 BTC (1% of 100BTC) to the seller. After the funding fee has been paid, your realised PnL is now -1 BTC.
   e. If you are short 100 BTC worth of BTC-USD contracts instead,you will receive 1 BTC (from the buyer of your 100BTC). Your realised PnL will then be 1 BTC.

   Examples:

   i. Long BTCUSD Perpetual Contract Example
   ii. The following examples do not take Premium into consideration for Perpetual Contracts
   iii. Realised Profit = ($1/1,000 - $1/$1,500) * 500 = 0.17 BTC
   iv. Margin Currency = Bitcoin
   v. Underlying Index = BTC OKEx Indices
   vi. Interest Quote Index = USD Lending Rate in the OKEx Indices (.USDBON)
   vii. Interest Base Index = BTC Lending Rate in the OKEx Indices (.BTCBON)
   viii. Funding Timestamp = 02:00 UTC, 10:00 UTC, and 18:00 UTC
   ix. Day 1, 08:00 UTC
   x. You go Long on 150,000 BTC-USD Perpetual Contracts at a price of 7500 USD.
   xi. BTC Position Value = 150,000 Contracts * 1 USD * 1/7500 = 20 BTC
   xii. Day 1, 10:00 UTC
   xiii. You hold the position over the Funding Timestamp at 10:00 UTC+00 and exchange the Funding Amount. The amount you pay is determined as below:
   xiv. The BTCUSD spot price is currently 7500 USD.
   xv. Interest Quote Index = 1.00% per day
   xvi. Interest Base Index = 0.25% per day
   xvii. Funding Rate = (1.00% - 0.25%) / 3 = 0.25%
   xviii. Funding Amount = Position Value * Funding Rate = 20 BTC * 0.25% = 0.05 BTC

xix. The Funding Amount is positive, so you need to pay since you are Long, and your counterpart who is Short receives this 0.05 BTC.
xx. Day 1, 16:00 UTC
xxi. The BTCUSD contract rises in price to 8000 USD. You close your position by selling the 150,000 BTCUSD contracts. Since you do this before the next Funding Timestamp at 18:00 UTC+00, you do not need to pay the Funding Amount at that time.
xxii. You made 1.25 BTC profit from the increase in the value of BTCUSD: PnL = 150,000 * 1 USD * (1/7500 - 1/8000) = 1.25 BTC
xxiii. You exchanged 0.05 BTC in funding, and your total profit is 1.2 BTC (1.25 BTC - 0.05 BTC).

Q. Fees

1. All trading fees are accounted for through PnL because realized PnL is the actual transaction taking place on the platform.

2. Suppose a user bought BTCUSD. The market has not moved. User's unrealised PnL is 0, but realised PnL is negative. User's realised PnL is negative because the user will be charged a small taker fee when the user bought BTCUSD.

3. If a user placed a passive limit order, the user will be classified as a maker once the order was executed. As a maker, users will be charged a maker fee on the trade which can be different from the taker fee.

4. When the order is partially filled and the rest of the order is placed on the orderbook, the trader becomes maker and taker at the same time.

R. Dashboard Display

1. Realised PNL is displayed in different locations on the CoinDCX's trading dashboard depending on whether users are merely reducing the size of an existing position, or closing it entirely. These orders are actually listed on OKex's ledger but a trader's personal realized PnLs and orders will be displayed on users CoinDCX dashboard.

2. If the user has an open position with an unrealised profit of 10 BTC, this amount will show on the Open Positions tab.

3. If the user completely closes the same position and realises a profit of 10 BTC, this 10 BTC will be shown on the Closed Positions tab.

4. If user then create a new position on the same contract, realised PNL will be reset to 0 BTC on the Open Positions tab. Realised PNL resulting from a partial closure of this new position will be displayed on the Open Positions tab.

5. If user then completely close this new position, any realised PNL will be added to that symbol on the Closed Positions tab.

S. Service Limitations

1. Except as required by law, CoinDCX may, without notice and without liability to the user, suspend or terminate access to, or refuse to provide, any Services at any time in CoinDCX sole discretion, including with limitation:

2. If CoinDCX believes, in its sole discretion, a user direct or indirect use, or attempt to use, the DCXFutures for any unlawful or improper purpose;

3. If a user provides any incomplete, incorrect or false information/KYC documents to CoinDCX;
4. If a user attempts to tamper, hack, modify or otherwise corrupt the security or functionality of the Site or the lending services;

5. If CoinDCX believes that the user's use of any method of payment is unauthorized, or if the method of payment is declined or user's payment is blocked or reversed for any reason;

6. If a user has breached any portion of this terms and conditions;

7. If CoinDCX determines such action is necessary to comply with Terms of Use, any of CoinDCX policies, procedures or practices, or any law, rule or regulation; and/or

8. Breach of any law applicable on the user's account.

9. Users agree that CoinDCX will not be held responsible or liable to users or any other person for such action except as required by law.

T. General Rules

1. Users shall comply with local regulations and law as well as the related rules of trading disclosed at CoinDCX Terms & Conditions. CoinDCX reserves the right to suspend or cancel any user's access to OTC Trading Desk, or any related risk control measure when deemed necessary to maintain an orderly market.

2. The terms not less than, within, not more than are all inclusive terms and the terms less than, beyond and over/below are exclusive terms.

3. The terms are established by our company. This document or any further amendments are in effect immediately after being made known through our blog/FAQ/Official communication channels/Website.

4. We reserve the right of interpretation of this document.