

Types of Trading

Spot - Buy or sell Bitcoin for immediate delivery

Margin - Buy or sell Bitcoin on the spot book with borrowed funds

Futures - Buy or sell financial contracts that settle based on the Bitcoin Price

Where Does Leverage Come From

Refer to the Leverage tab

Margin Trading - Money is borrowed from other users or the exchange

Futures Trading - The exchange sets the leverage level, leverage is provided by the trading counterparty

Types Of Bitcoin Futures

Quanto Futures - Fixed Bitcoin multiplier applied to the USD price

XBT Value = Price * Multiplier * Contracts

USD Value = Price² * Multiplier * Contracts

Linear in Bitcoin terms, quadratic in USD terms

The BitMEX Speculation (XBT) series of Bitcoin / USD futures are quanto

Refer to Quanto tab

Types Of Bitcoin Futures

Inverse Futures - Each contract is worth a fixed amount of USD at every Bitcoin price

USD Value = USD Contract Value e.g. \$100

XBT Value = USD Contract Value / Price * Contracts

Fixed in USD terms, exponential in Bitcoin terms

The BitMEX Hedging (XBU) series of Bitcoin / USD futures are inverse

Refer to Inverse tab

Quanto vs. Inverse

Quanto futures better for bullish traders / speculators

Inverse futures better for bearish traders / hedgers

Quanto futures will trade at a premium to Inverse futures

Refer to Quanto vs. Inverse tab

Covered Interest Rate Parity

Borrow USD at 10% for 1 year

Buy Bitcoin

Lend Bitcoin at 5% for 1 year

Sell Bitcoin in 1 year

Repay USD Loan

No arbitrage Bitcoin / USD forward price

Forward = Spot * (1 + USD_r) / (1 + XB_{Tr}) = \$100 * (1.1/1.05) = \$104.76

Pricing Futures

XBT Pricing Sheet:

https://docs.google.com/spreadsheets/d/1ImBQlxXLcJzbr_NoDWy3UvQ7mxvEikN3jvn7mfqL3Al/edit?usp=sharing

XBU Pricing Sheet:

<https://docs.google.com/spreadsheets/d/1Y2Yz8dRXfX1-50h8n4b7VEyfGkt0rbqTN2I2D3mSEzs/edit?usp=sharing>