

Topics Covered

Risk Metrics

- Delta
- Theta
- Bitcoin Value of 1%

Portfolio Risk Management

Delta

Delta is how the futures contract's Bitcoin value changes with price

Delta is the first derivative of the Bitcoin value with respect to price

When talking risk management, delta is the Bitcoin price exposure

Delta = Futures' Bitcoin value using spot price

Change in Delta = Delta PNL

Theta

Theta is the daily value lost or gained due to the passage of time

Buying a Future at a premium has a negative Theta

Selling a Future at a premium has a positive Theta

Basis Delta = Futures Delta - Spot Delta

Theta = Basis Delta / Days to Expiry * -1

BV01

BV01 = Bitcoin Value of 1%

How does the value of the futures contract change when interest rates move 1%

$BV01 = 1\% * t * \text{Delta}$

A positive BV01 means a negative Theta

A negative BV01 means a positive Theta