

Margin Price handling

Equity derivatives

Instrument group	Margin Price method	Price source
Index and single stock futures/forwards	<p>Intra-day price runs at least each hour, where a theoretical price is calculated based on the real-time underlying index value/stock price and the most recently observed Implied Future/Forward Rate off the Nasdaq Exchange orderbook quoted/traded future/forward.</p> <p>The End of day margin price is set to the future's Fixing price.</p>	Nasdaq Exchange
Index options	<p>Theoretical price based on Index futures price and implied volatility sourced from <i>Markit</i>¹.</p> <p>Intra-day price updates at least each hour, where implied volatilities from Markit is adjusted based on observed Nasdaq Derivatives Market Exchange orderbook option quotes per expiration and instrument class².</p>	<i>Markit</i> , Nasdaq Exchange
Single stock options, highly liquid³	<p>Theoretical price based on the underlying stock price and implied volatility sourced from <i>Markit</i>.</p> <p>Intra-day price updates at least each hour, where implied volatilities from Markit is adjusted based on observed Nasdaq Exchange orderbook quotes per expiration and instrument class.</p>	<i>Markit</i> , Nasdaq Exchange
Single stock options, other	<p>Theoretical price based on the underlying stock price and average implied volatility. The average implied volatility is calculated for the three most at-the-money strikes per stock, expiration and instrument class off Nasdaq Exchange orderbook option quotes.</p> <p>Intra-day price updates at least each hour.</p>	Nasdaq Exchange

¹ Markit Equity Daily Volatility Service: Independent, high-quality, robust and timely. www.markit.com

² At market opening the three most at-the-money options per expiration and instrument class are identified. The average impl. Vol for these three options is calculated. During the trading day, these procedure is repeated. In each intra-day price run is the change in average impl. vol is added to the Markit impl. vol data points (i.e. a parallell shift up or down, no change in skewness), per expiration month and instrument class.

³ Stocks classified as highly liquid as of 2015-05-07: AZN, ELUXB, ERICB, HMB, NDA, SAND, SWED, TLSN, VOLVB

Fixed Income derivatives

Instrument group	Margin Price method	Price source
SEK bond forwards, futures, repos, FRA's and IRS	Yield curve built from benchmark bonds. Price run at least each hour.	Nasdaq Exchange
EUR, DKK, NOK bond forwards, futures, repos, FRA's and IRS	Yield curve built from benchmark bonds. Price run at least each hour.	<i>Reuters</i>
Interest rate options	Theoretical price based on yield curves and implied volatility. Price run at least each hour.	Nasdaq Exchange , <i>Reuters</i> , Bank/broker quotes

Nasdaq Clearing Risk Management, 2015-10-26

www.nasdaqomx.com/europeanclearing/risk-management