Variance Futures at Eurex Exchange

The newest addition to Eurex Exchange's growing volatility offering are Eurex Variance Futures, our on-exchange complement to OTC variance swaps. These innovative contracts replicate the payoff profile of OTC variance swaps. They are designed to fit the needs of a growing number of sophisticated investors who seek exposure to volatility and are simultaneously looking to benefit from the efficiencies of exchange trading and central clearing.

Your key benefits

- Exposure to the difference between implied versus realized volatility
- Create fungibility with futurization
- Allow users to expand their equity portfolio hedging strategies
- Give firms greater price transparency through a centralized order book
- Mitigate risk with Eurex Clearing as the central counterparty
- Expanded functionality and minimal latency on our leading T7 trading architecture

How they work

The concept of Variance Futures entails converting individual transactions into a standard product along the lines of EURO STOXX® 50 Index Futures. They feature a standard variance strike, fixed start date and maturity. The final settlement of the OTC variance swap is replicated via daily variation margin payments.

- During the day, the product trades in notional vega at volatility strikes, as shown in the market snap below.

- On trade match, the notional vega of the trade is converted into a position in Variance Futures and the traded volatility strike will be converted into a futures price.
- First, the traded volatility strike is converted into variance and adjusted for the historical variance of the (running) standard futures.
- This adjusted strike is then converted into the traded price of the standard futures contract.
- The notional vega is converted into Variance Futures, also adjusted for the history of the (running) standard futures. The amount is dependent upon the traded price and the lifetime of the trade.

Clearing concept

- EURO STOXX 50® index close is required for the correct conversion from volatility to futures price. For the required futures price update the cancel/reboot process was developed.
- Intraday, Eurex Exchange converts order book trades from vega to futures at a preliminary futures price.
- At end of day, Eurex Clearing automatically cancels preliminary trades and replaces them with trades based

Screenshot: Eurex Trader GUI

CPhase	TrdUnit	CPrev SetlPrc	CVol	CBQty	CBid	CAsk	CAQty	CLst	CPotAuct	CQRI	Contract	Curr
Cont	1.0000	15.8200		40,000	**14.8000**	**15.6000**	40,000				**EVAR Apr15**	EUR
Cont	1.0000	18.4400		50,000	**18.2000**	**19.0000**	50,000				**EVAR May15**	EUR
Cont	1.0000	19.8900		50,000	**19.8000**	**20.6000**	50,000				**EVAR Jun15**	EUR
Cont	1.0000	21.0800		50,000	**20.7000**	**21.9000**	50,000				**EVAR Sep15**	EUR
Cont	1.0000	21.6200		50,000	**21.2500**	**22.4500**	50,000				**EVAR Dec15**	EUR
Cont	1.0000	22.0800		50,000	**21.7000**	**23.1500**	50,000				**EVAR Mar16**	EUR
Cont	1.0000	22.8200		50,000	**22.2500**	**23.9500**	50,000				**EVAR Jun16**	EUR
Cont	1.0000	22.9100		50,000	**22.6000**	**24.3500**	50,000				**EVAR Dec16**	EUR

Notional vega | Volatility strike

on the original vega notional and volatility strikes, but with a futures price that considers the EURO STOXX 50® close in its realized variance.

- Block trades and other transactions are entered at their final futures price. In order to prevent clearing of pre-liminary trades, the clearing functionalities are available from 18:30 CET. At this point in time, the cancel/rebook process is finished and clients have their positions at final futures prices.

Web services

To support the usage and understanding of Variance Futures additional services are supplied on the website **www.eurexchange.com/var**
- Variance Futures conversion parameters
- Variance Futures conversion tool

Contract specifications

	Variance Futures
Contract value	EUR 1 per Variance Futures point
Contract terms	Variance Futures are available for trading at Eurex Exchange until one day before the final settlement day of each of the following terms: up to and in each case including the final settlement day of the next, the second and the third succeeding calendar month and the next three succeeding quarter-end months (March, June, September, December) and the next two succeeding half-year expiration days (June and December) thereafter.
Minimum price change	0.0001 Variance Futures points
Price quotation and tick size / value	EUR 0.0001
Settlement type/settlement day	Cash settlement; one exchange day after the last trading day.
Final settlement price	Based on the average of the EURO STOXX 50® index calculations between 11:50 and 12:00 CET on the third Friday of the maturity month
Last trading day/time	One business day before the third Friday of the maturity month
Continuous Trading hours	09:00 CET–17:30 CET
Eurex Trade Entry Services hours / minimum size	18:30 CET–21:00 CET / 1 contract
Trade matching/ Block Trade Entry Service	Variance Futures are traded on-exchange in terms of notional vega at volatility. Upon matching notional vega and volatility are converted into Variance Futures at Variance Futures prices. The corresponding conversion formulas and parameters are published by the exchange. Block trades are entered in Variance Futures at final Variance Futures prices.
Vendor codes	**Bloomberg:** VETA <INDEX> GO **Reuters:** <0#EVAR:>

Product details

Price conversion	On-exchange trades are converted twice: 1. Upon matching from volatility into a preliminary futures price 2. End of day into the final traded futures price. This factor in the realized variance until end of day (starts the variance observation at the end of the trading day)
Standard strike	The standard strike will be determined on the first trading day. It will be equal to the settled implied volatility on that day.

For further information please visit www.eurexchange.com or contact

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