

# EURO STOXX® 50 VOLATILITY (VSTOXX) INDEX

## Index description

The VSTOXX indices aim to measure the volatility of the EURO STOXX 50 Index over a future time horizon, as implied by the option contracts available on the Eurex Exchange on that Index.

The 8 VSTOXX sub indices cover the actual next 1, 2, 3, 6, 9, 12, 18, 24 month expiries of EURO STOXX 50 option contracts.

The 12 VSTOXX main indices cover the time ranges from 30 to 360 days, in increments of 30 days.

## Key facts

» The VSTOXX methodology exploits the whole option strike spectrum to provide as accurate an estimate of implied volatility as possible, in contrast to other models utilizing solely (near) AtM strikes

» The EURO STOXX 50 options are among the products of Eurex with highest trading volume

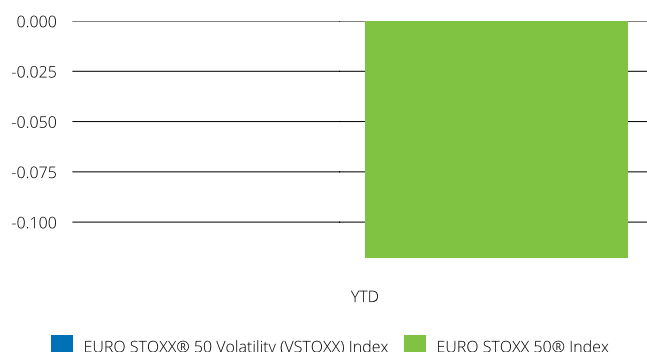
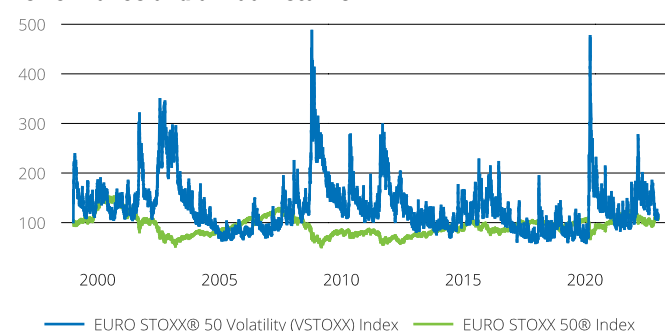
» The VSTOXX indices reflect the skewed/smiling profile of the volatility surface

» The methodology is based on the non-arbitrage approach used in pricing variance swaps

## Risk and return figures<sup>1</sup>

Index returns	Return (%)					Annualized return (%)				
	Last month	YTD	1Y	3Y	5Y	Last month	YTD	1Y	3Y	5Y
EURO STOXX 50 Volatility (VSTOXX) Index	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
EURO STOXX 50 Index	-4.3	-11.7	-11.7	1.3	8.3	N/A	N/A	-11.9	0.4	1.6
Index volatility and risk	Annualized volatility (%)					Annualized Sharpe ratio <sup>2</sup>				
	Last month	YTD	1Y	3Y	5Y	Last month	YTD	1Y	3Y	5Y
EURO STOXX 50 Volatility (VSTOXX) Index	0.0	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0
EURO STOXX 50 Index	18.1	23.7	23.7	24.7	21.0	N/A	N/A	-0.5	0.0	0.1
Index to benchmark	Correlation					Tracking error (%)				
	Last month	YTD	1Y	3Y	5Y	Last month	YTD	1Y	3Y	5Y
EURO STOXX 50 Volatility (VSTOXX) Index	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Index to benchmark	Beta					Annualized information ratio				
	Last month	YTD	1Y	3Y	5Y	Last month	YTD	1Y	3Y	5Y
EURO STOXX 50 Volatility (VSTOXX) Index	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

## Performance and annual returns<sup>3</sup>



<sup>1</sup> For information on data calculation, please refer to STOXX calculation reference guide.

<sup>2</sup> Based on EURIBOR1M

<sup>3</sup> STOXX data from Jan. 04, 1999 to Dec. 30, 2022

(EUR, price), all data as of Dec. 30, 2022

## STRATEGY INDICES

## EURO STOXX® 50 VOLATILITY (VSTOXX) INDEX

## Methodology

Eight VSTOXX subindices are calculated simultaneously, each reflecting respectively the actual next 1, 2, 3, 6, 9, 12, 18, 24 month expiries of EURO STOXX 50 option contracts on the Eurex Exchange. Each sub-Index is calculated as the fair delivery price of future volatility in a variance swap of the relevant maturity.

To obtain the main VSTOXX indices, i.e. indices with fixed-term maturity ranging from 30 to 360 days, two nearby subindices are interpolated in time. Volatility is expressed in annualized terms.

## Versions and symbols

Index	ISIN	Symbol	Bloomberg	Reuters
Price	EUR	DE000A0C3QF1	V2TX	V2X INDEX
Price	EUR	DE000A0C3QF1	V2TX	V2X INDEX
				.V2TX

Complete list available here: [www.stoxx.com/data/vendor\\_codes.html](http://www.stoxx.com/data/vendor_codes.html)

## High, low, mean

	YTD			2014			2013			2012		
	High	Low	Mean	High	Low	Mean	High	Low	Mean	High	Low	Mean
VSTOXX 30 days	22.538	19.0621	20.66	49.6395	17.7553	27.01	32.3129	15.1511	20.05	85.6206	10.6899	28.87
VSTOXX 60 days	23.0355	20.3521	21.72	45.4938	19.6892	27.52	30.8067	16.9626	21.15	77.4087	12.5845	28.63
VSTOXX 90 days	24.0156	21.593	22.67	43.3782	21.3649	28.01	30.4702	18.2095	22.04	71.9067	13.5865	28.61
VSTOXX 120 days	24.6318	22.5433	23.42	41.3358	22.4038	28.28	29.9979	19.1441	22.67	66.0534	14.2459	28.46
VSTOXX 150 days	24.9964	23.183	23.9	39.6354	23.0046	28.4	29.5811	19.5107	23.09	62.018	14.5704	28.31
VSTOXX 180 days	25.2366	23.5262	24.22	38.4974	23.3449	28.41	29.3	19.887	23.37	59.1751	14.9756	28.14
VSTOXX 210 days	25.4077	23.7909	24.46	37.8005	23.5524	28.37	28.9626	20.1731	23.58	55.9762	15.2815	27.91
VSTOXX 240 days	25.5353	23.9757	24.63	37.359	23.7069	28.31	28.9004	20.3851	23.72	53.9452	15.507	27.66
VSTOXX 270 days	25.6342	24.1185	24.77	37.012	23.8759	28.22	28.991	20.5986	23.83	52.4673	15.9125	27.37
VSTOXX 300 days	25.7747	24.3746	24.94	36.3059	24.048	28.14	29.0633	20.7784	23.93	50.5449	16.1744	27.05
VSTOXX 330 days	25.8948	24.6063	25.09	35.3802	24.1879	28.07	29.036	20.8939	24.04	48.72	16.365	26.76
VSTOXX 360 days	25.9945	24.7873	25.23	34.5898	24.3234	28.01	28.8029	21.2437	24.14	47.1452	16.5013	26.53

## CONTACT DETAILS

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## BACKTESTED PERFORMANCE

This document contains index performance data based on backtesting, i.e. calculations of how the index might have performed prior to launch if it had existed using the same index methodology and based on historical constituents. Backtested performance information is purely hypothetical and is provided in this document solely for information purposes. Backtested performance does not represent actual performance and should not be interpreted as an indication of actual performance.

## CUSTOMIZATION

The index can be used as a basis for the definition of STOXX® Customized Indices, which can be tailored to specific client or mandate needs. STOXX offers a wide range of customization, in terms of component selection, weighting schemes and personalized calculation methodologies.

