

ISTOXX[®] EUROPE MINIMUM VARIANCE INDEX

Index description

The iSTOXX[®] Europe Minimum Variance Index aims to replicate the volatility of the STOXX[®] Europe 600 Index, by weighting its components so that portfolio variance is minimized. Optimization results show that the minimum variance portfolio can be created without the need to trade all 600 components.

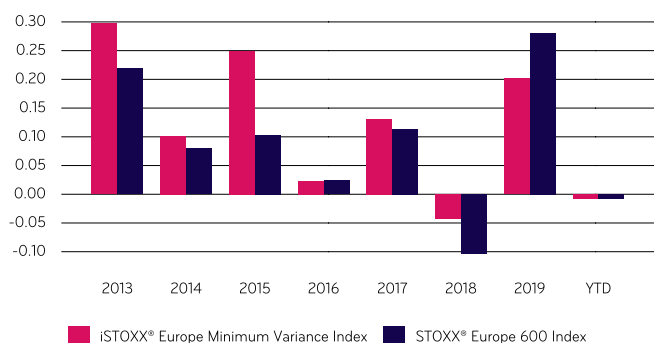
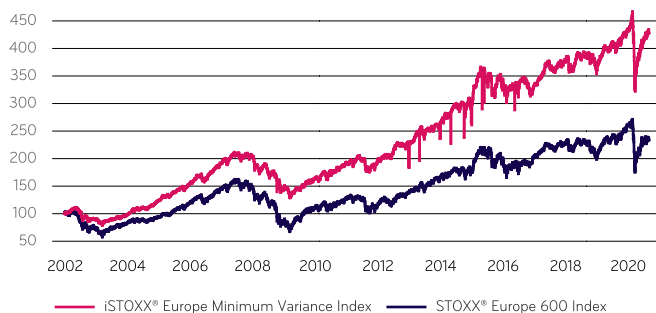
Key facts

- » Minimized volatility is suitable for risk-averse investors. At the same time, the return of the index is higher than the benchmark.
- » Suitable as a liquid underlying for ETFs and structured products. It is easy to replicate as it has fewer components than the underlying index. It also has predictable rebalancing dates and is optimized to allow tracking (low turnover, transaction costs analysis, etc.).
- » Constraints on diversification and security and industry exposure are applied.

Risk and return figures¹

Index returns	Return (%)					Annualized return (%)				
	Last month	YTD	1Y	3Y	5Y	Last month	YTD	1Y	3Y	5Y
iSTOXX Europe Minimum Variance Index	2.2	-0.9	4.9	18.5	31.0	N/A	N/A	5.0	5.9	5.6
STOXX Europe 600 Index	3.1	-9.9	-0.8	8.0	19.1	N/A	N/A	-0.8	2.6	3.6
Index volatility and risk	Annualized volatility (%)					Annualized Sharpe ratio ²				
iSTOXX Europe Minimum Variance Index	11.0	24.8	20.9	14.2	16.6	2.1	N/A	0.3	0.4	0.4
STOXX Europe 600 Index	14.9	32.0	27.0	18.3	17.9	1.7	N/A	0.0	0.2	0.2
Index to benchmark	Correlation					Tracking error (%)				
iSTOXX Europe Minimum Variance Index	0.9	0.9	0.9	0.9	0.8	7.3	12.7	10.8	7.4	12.0
Index to benchmark	Beta					Annualized information ratio				
iSTOXX Europe Minimum Variance Index	0.7	0.7	0.7	0.7	0.7	-1.5	0.9	0.3	0.3	0.1

Performance and annual returns³



¹ For information on data calculation, please refer to STOXX [calculation reference guide](#).

² Based on Euribor1m

³ STOXX data from Dec. 24, 2001 to Aug. 31, 2020

(EUR, gross return), all data as of Aug. 31, 2020

ISTOXX INDICES

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Methodology

On the basis of the underlying index, a covariance matrix is set up by determining the historical correlation between each component pair. The constituents' weights are determined in such a way that the historical variance of the resulting index is minimized. The optimization, which involves a quadratic programming analysis, is subject to constraints in terms of diversification and maximum weights at both security and industry group (ICB 1) level.

Quick facts	
Weighting	According to minimum variance approach
Cap factor	4.5% for components, 20% for sectors
No. of components	Variable
Review frequency	Monthly
Calculation/distribution	Price, net return, gross return (EUR): realtime (every 15 seconds)
Calculation hours	Realtime: 9:00 am - 5:45 pm CET
Base value/base date	100 as of May 20, 2011
History	Available daily back to Dec. 28, 2001
Inception date	Jun. 24, 2011

Versions and symbols

Index	ISIN	Symbol	Bloomberg	Reuters
Gross Return EUR	CH0128395313	ISEMVT	ISEMVT INDEX	.ISEMVT
Gross Return EUR	CH0128395313	ISEMVT	ISEMVT INDEX	.ISEMVT
Net Return EUR	CH0124001543	ISEMVT	ISEMVT INDEX	.ISEMVT
Net Return EUR	CH0124001543	ISEMVT	ISEMVT INDEX	.ISEMVT
Price EUR	CH0124001618	ISEMVP	ISEMVP INDEX	.ISEMVP
Price EUR	CH0124001618	ISEMVP	ISEMVP INDEX	.ISEMVP

Complete list available here: www.stoxx.com/data/vendor_codes.html

CONTACT DETAILS

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STOXX is part of Deutsche Boerse Group

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.

DISCLAIMER

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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.

ISTOXX INDICES**ISTOXX® EUROPE MINIMUM VARIANCE INDEX****Top 10 Components⁴**

Company	Supersector	Country	Weight (%)
QIAGEN	Health Care	DE	3.95
DEUTSCHE WOHNEN	Real Estate	DE	3.66
SCOUT24	Technology	DE	3.65
SCHINDLER P	Industrial Goods & Services	CH	3.44
AHOLD DELHAIZE	Retail	NL	3.17
KONE B	Industrial Goods & Services	FI	3.14
BARRY CALLEBAUT	Food & Beverage	CH	3.12
TESCO	Retail	GB	2.97
COLOPLAST B	Health Care	DK	2.63
SUNRISE	Telecommunications	CH	2.44

⁴ Based on the composition as of Aug. 31, 2020