STRATEGY INDICES
EURO STOXX MINIMUM VARIANCE

Index description

The EURO STOXX Minimum Variance index weights the components of the underlying EURO STOXX index so that portfolio variance is minimized. STOXX uses Axioma's factor model for the optimization process. The constrained version creates a portfolio similar to the underlying benchmark index, but with a more attractive risk profile. This is achieved by applying a range of factors, country and industry exposure constraints to ensure that components have no high allocation bias.

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.).
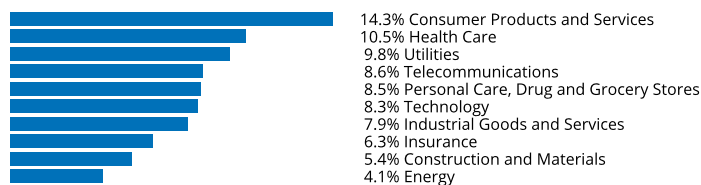
»Capping constraints are applied in accordance with the Undertakings for Collective Investment in Transferable Securities (UCITS) directive to ensure that funds can easily track the index.

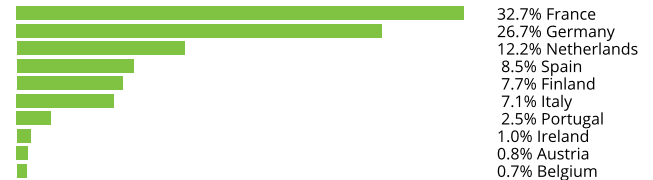»Constraints on diversification and security, country, industry and factor exposure are applied.

Descriptive statistics

Index	Market cap (EUR bn.)		Components (EUR bn.)				Component weight (%)		Turnover (%)
	Full	Free-float	Mean	Median	Largest	Smallest	Largest	Smallest	Last 12 months
EURO STOXX Minimum Variance	N/A	99.9	1.3	0.6	7.2	0.0	7.2	0.0	30.3
EURO STOXX	7,032.4	5,017.5	17.2	6.9	245.1	1.5	4.9	0.0	3.0

Supersector weighting (top 10)

14.3% Consumer Products and Services
10.5% Health Care
9.8% Utilities
8.6% Telecommunications
8.5% Personal Care, Drug and Grocery Stores
8.3% Technology
7.9% Industrial Goods and Services
6.3% Insurance
5.4% Construction and Materials
4.1% Energy

Country weighting

32.7% France
26.7% Germany
12.2% Netherlands
8.5% Spain
7.7% Finland
7.1% Italy
2.5% Portugal
1.0% Ireland
0.8% Austria
0.7% Belgium

Risk and return figures[1]

Index returns			Return (%)						Annualized return (%)		
	Last month	YTD	1Y	3Y	5Y	Last month	YTD	1Y	3Y	5Y
EURO STOXX Minimum Variance	-0.2	9.8	10.5	19.2	18.7	N/A	N/A	10.6	6.1	3.5
EURO STOXX	-3.1	22.4	20.8	37.8	38.8	N/A	N/A	21.0	11.4	6.9
Index volatility and risk			Annualized volatility (%)						Annualized Sharpe ratio		
EURO STOXX Minimum Variance	N/A	N/A	11.5	13.4	15.6	N/A	N/A	0.6	0.4	0.2
EURO STOXX	N/A	N/A	15.9	17.8	19.9	N/A	N/A	1.0	0.6	0.3
Index to benchmark			Correlation						Tracking error (%)		
EURO STOXX Minimum Variance	0.9	0.9	0.9	0.9	0.9	6.0	7.2	7.1	7.4	7.5
Index to benchmark			Beta						Annualized information ratio		
EURO STOXX Minimum Variance	0.6	0.6	0.7	0.7	0.7	5.5	-1.0	-1.4	-0.8	-0.6

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

(EUR, gross return), all data as of Aug. 31, 2023

STOXX Ltd. is part of Qontigo

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Fundamentals (for last 12 months)

Index	Price/earnings incl. negative		Price/earnings excl. negative		Price/ book	Dividend yield (%) [3]	Price/ sales	Price/ cash flow
	Trailing	Projected	Trailing	Projected	Trailing	Trailing	Trailing	Trailing
EURO STOXX Minimum Variance	16.4	15.5	16.4	15.5	2.0	3.5	1.0	4.2
EURO STOXX	14.7	12.1	12.7	11.7	1.6	3.8	1.0	4.3

Performance and annual returns[4]

- EURO STOXX Minimum Variance
- EURO STOXX

- EURO STOXX Minimum Variance
- EURO STOXX
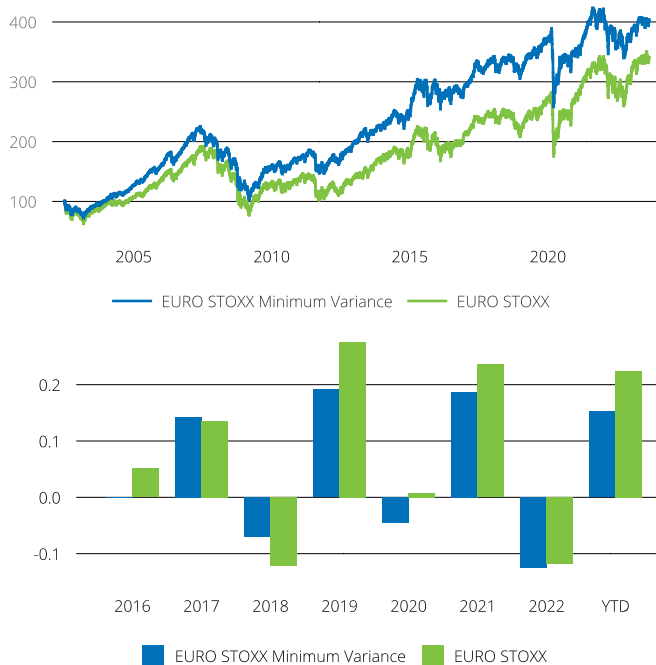
Methodology

On the basis of the underlying index, a covariance matrix is set up by determining the correlation between each component and specific factors. Using Axioma's factor model, the variance-covariance structure of the components is determined, which is then minimized with respect to applicable constraints. The constraints applied cover capping, effective number of assets, rebalancing and turnover, country/industry exposure and other factor exposures, such as growth, value, short-/mid-term momentum, leverage, etc. The full list of factors including the requirements to be met can be accessed in our Index rulebook:
http://www.stoxx.com/indices/rulebooks.html

Versions and symbols

Index		ISIN	Symbol	Bloomberg	Reuters
Gross Return	EUR	CH0180138320	SAXEMVGR	SAXEMVGR INDEX	.SAXEMVGR
Price	EUR	CH0180138007	SAXEMVP	SAXEMVP INDEX	.SAXEMVP
Net Return	EUR	CH0180138163	SAXEMVR	SAXEMVR INDEX	.SAXEMVR
Price	USD	CH0180138486	SAXEMVL	SAXEMVL INDEX	.SAXEMVL
Net Return	USD	CH0180138643	SAXEMVV	SAXEMVV INDEX	.SAXEMVV
Gross Return	USD	CH0180138809	SAXEMVGV	SAXEMVGV INDEX	.SAXEMVGV

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

Quick facts

Weighting	Optimization
Cap factor	4.5% / 8% / 35%
No. of components	Variable
Review frequency	Quarterly (Mar., Jun., Sep., Dec.)

To learn more about the inception date, the currency, the calculation hours and historical values, please see our data vendor code sheet.

[3] gr. div. yield is calculated as gr. return index return minus price index return
[4] STOXX data from Jul. 01, 2002 to Aug. 31, 2023

(EUR, gross return), all data as of Aug. 31, 2023

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Top 10 Components[5]

Company	Supersector	Country	Weight (%)
HENKEL PREF	Consumer Products and Services	Germany	7.23
L'OREAL	Consumer Products and Services	France	7.09
TERNA	Utilities	Italy	5.09
BEIERSDORF	Personal Care, Drug and Grocery	Germany	4.83
SAMPO	Insurance	Finland	3.97
KPN	Telecommunications	Netherlands	3.89
ORANGE	Telecommunications	France	3.88
MERCK	Health Care	Germany	3.67
QIAGEN	Health Care	Germany	3.66
WOLTERS KLUWER	Media	Netherlands	3.65

[5] Based on the composition as of Aug. 31, 2023