

# EURO STOXX® MINIMUM VARIANCE INDEX

## 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.).

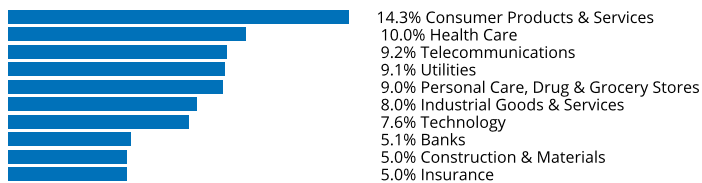
»Capping constraints are applied in accordance with the Undertakings for Collective Investment in Transferable Securities (UCITS) directive to ensure that funds can easily track the index.

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

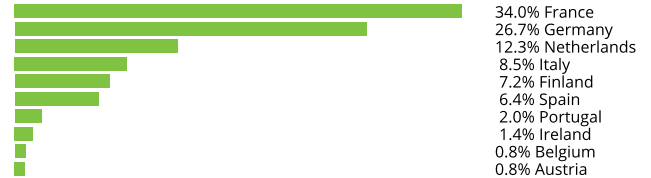
## Descriptive statistics

| 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 Index | N/A                  | 98.1       | 1.1                  | 0.5    | 7.2     | 0.1      | 7.3                  | 0.1      | 30.5           |
| EURO STOXX Index                  | 6,894.9              | 4,902.9    | 16.8                 | 6.8    | 270.7   | 0.8      | 5.5                  | 0.0      | 3.1            |

## Supersector weighting (top 10)



## Country weighting



## 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 Minimum Variance Index | -2.5                      | 7.9  | 3.1  | 24.2 | 18.3 | N/A                                  | N/A  | 3.1  | 7.6  | 3.5  |
| EURO STOXX Index                  | -2.2                      | 11.2 | 8.7  | 44.5 | 35.1 | N/A                                  | N/A  | 8.8  | 13.2 | 6.3  |
| Index volatility and risk         | Annualized volatility (%) |      |      |      |      | Annualized Sharpe ratio <sup>2</sup> |      |      |      |      |
| EURO STOXX Minimum Variance Index | 8.3                       | 9.9  | 12.9 | 14.1 | 15.5 | N/A                                  | N/A  | 0.0  | 0.5  | 0.2  |
| EURO STOXX Index                  | 12.4                      | 15.1 | 17.7 | 18.5 | 19.9 | N/A                                  | N/A  | 0.3  | 0.6  | 0.3  |
| Index to benchmark                | Correlation               |      |      |      |      | Tracking error (%)                   |      |      |      |      |
| EURO STOXX Minimum Variance Index | 0.9                       | 0.9  | 0.9  | 0.9  | 0.9  | 6.9                                  | 7.7  | 7.8  | 7.5  | 7.5  |
| Index to benchmark                | Beta                      |      |      |      |      | Annualized information ratio         |      |      |      |      |
| EURO STOXX Minimum Variance Index | 0.6                       | 0.6  | 0.7  | 0.7  | 0.7  | -0.7                                 | -1.1 | -0.8 | -0.8 | -0.5 |

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

<sup>2</sup> Based on EURIBOR1M

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

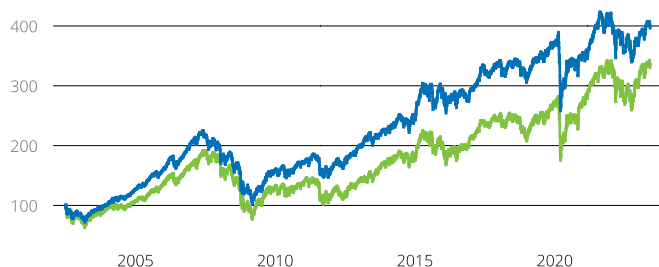
## MINIMUM VARIANCE

# EURO STOXX® MINIMUM VARIANCE INDEX

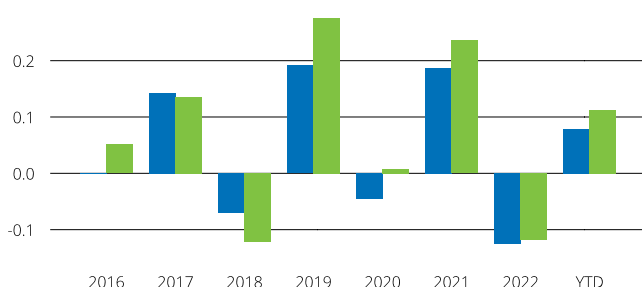
### Fundamentals (for last 12 months)

| Index                             | Price/earnings<br>incl. negative |           | Price/earnings<br>excl. negative |           | Price/<br>book | Dividend<br>yield (%) <sup>3</sup> | Price/<br>sales | Price/<br>cash flow |
|-----------------------------------|----------------------------------|-----------|----------------------------------|-----------|----------------|------------------------------------|-----------------|---------------------|
|                                   | Trailing                         | Projected | Trailing                         | Projected | Trailing       | Trailing                           | Trailing        | Trailing            |
| EURO STOXX Minimum Variance Index | 17.1                             | 15.2      | 16.8                             | 15.2      | 2.0            | 3.1                                | 1.0             | 4.6                 |
| EURO STOXX Index                  | 15.0                             | 11.9      | 13.2                             | 11.6      | 1.6            | 3.4                                | 1.0             | 1.1                 |

### Performance and annual returns<sup>4</sup>



— EURO STOXX® Minimum Variance Index — EURO STOXX® Index



■ EURO STOXX® Minimum Variance Index ■ EURO STOXX® Index

### 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 |
| Net Return EUR   | CH0180138163 | SAXEMVR  | SAXEMVR INDEX  | .SAXEMVR  |
| Net Return EUR   | CH0180138163 | SAXEMVR  | SAXEMVR INDEX  | .SAXEMVR  |
| Price EUR        | CH0180138007 | SAXEMVP  | SAXEMVP INDEX  | .SAXEMVP  |
| Price EUR        | CH0180138007 | SAXEMVP  | SAXEMVP INDEX  | .SAXEMVP  |
| Gross Return USD | CH0180138809 | SAXEMGV  | SAXEMGV INDEX  | .SAXEMGV  |
| Net Return USD   | CH0180138643 | SAXEMVV  | SAXEMVV INDEX  | .SAXEMVV  |
| Net Return USD   | CH0180138643 | SAXEMVV  | SAXEMVV INDEX  | .SAXEMVV  |
| Price USD        | CH0180138486 | SAXEMVL  | SAXEMVL INDEX  | .SAXEMVL  |
| Price USD        | CH0180138486 | SAXEMVL  | SAXEMVL INDEX  | .SAXEMVL  |

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

### 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.

<sup>3</sup> gr. div. yield is calculated as gr. return index return minus price index return

<sup>4</sup> STOXX data from Jul. 01, 2002 to May 31, 2023

# MINIMUM VARIANCE EURO STOXX® MINIMUM VARIANCE INDEX

## Top 10 Components<sup>5</sup>

| <b>Company</b> | <b>Supersector</b>                   | <b>Country</b> | <b>Weight (%)</b> |
|----------------|--------------------------------------|----------------|-------------------|
| HENKEL PREF    | Consumer Products & Services         | Germany        | 7.30              |
| L'OREAL        | Consumer Products & Services         | France         | 7.03              |
| MERCK          | Health Care                          | Germany        | 5.50              |
| TERNA          | Utilities                            | Italy          | 5.28              |
| BEIERSDORF     | Personal Care, Drug & Grocery Stores | Germany        | 4.80              |
| SAMPO          | Insurance                            | Finland        | 4.24              |
| ORANGE         | Telecommunications                   | France         | 4.22              |
| KPN            | Telecommunications                   | Netherlands    | 3.91              |
| WOLTERS KLUWER | Media                                | Netherlands    | 3.54              |
| AHOLD DELHAIZE | Personal Care, Drug & Grocery Stores | Netherlands    | 3.28              |

<sup>5</sup> Based on the composition as of May 31, 2023