

# STOXX® ASIA/PACIFIC 600 MINIMUM VARIANCE UNCONSTRAINED INDEX

## Index description

The STOXX Asia/Pacific 600 Minimum Variance Unconstrained index weights the components of the underlying STOXX Asia/Pacific 600 index so that portfolio variance is minimized. STOXX uses Axioma's factor model for the optimization process. The Unconstrained version applies loosely stated constraints to seek an improved risk profile. It targets investors seeking a more optimal portfolio in terms of replicated volatility.

## 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.

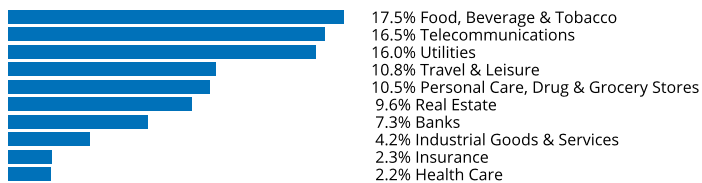
»Two versions - Constrained and Unconstrained - cater to different investor needs.

»The Unconstrained version offers a first-of-its-kind index for a true minimum variance mandate.

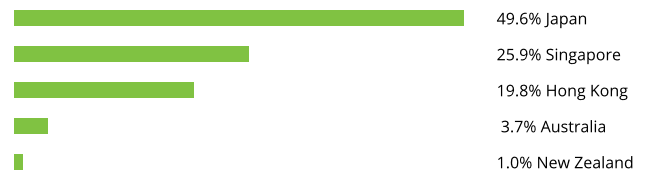
## Descriptive statistics

| Index   | Market cap (EUR bn.) |            | Components (EUR bn.) |        |         |          | Component weight (%) |          | Turnover (%)   |
|---|----------------------|------------|----------------------|--------|---------|----------|----------------------|----------|----------------|
|   | Full                 | Free-float | Mean                 | Median | Largest | Smallest | Largest              | Smallest | Last 12 months |
| STOXX Asia/Pacific 600 Minimum Variance Unconstrained Index | N/A                  | 102.7      | 0.7                  | 0.3    | 5.9     | 0.0      | 5.8                  | 0.0      | 60.7           |
| STOXX Asia/Pacific 600 Index                                | 7,115.3              | 5,958.1    | 9.9                  | 4.2    | 188.5   | 1.3      | 3.2                  | 0.0      | 2.9            |

## 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   |
| STOXX Asia/Pacific 600 Minimum Variance Unconstrained Index | 1.7                       | 0.2  | -5.2 | 10.4 | 7.9  | N/A                                  | N/A  | -5.3 | 3.4  | 1.6  |
| STOXX Asia/Pacific 600 Index                                | 2.6                       | 8.2  | 3.3  | 32.6 | 27.0 | N/A                                  | N/A  | 3.3  | 10.0 | 5.0  |
| Index volatility and risk                                   | Annualized volatility (%) |      |      |      |      | Annualized Sharpe ratio <sup>2</sup> |      |      |      |      |
| STOXX Asia/Pacific 600 Minimum Variance Unconstrained Index | 7.6                       | 9.6  | 10.1 | 10.0 | 11.2 | N/A                                  | N/A  | -0.8 | 0.3  | 0.1  |
| STOXX Asia/Pacific 600 Index                                | 11.3                      | 13.2 | 14.1 | 14.1 | 15.2 | N/A                                  | N/A  | 0.1  | 0.6  | 0.3  |
| Index to benchmark  | Correlation               |      |      |      |      | Tracking error (%)                   |      |      |      |      |
| STOXX Asia/Pacific 600 Minimum Variance Unconstrained Index | 0.9                       | 0.8  | 0.8  | 0.8  | 0.8  | 6.4                                  | 7.7  | 8.8  | 8.9  | 8.7  |
| Index to benchmark  | Beta                      |      |      |      |      | Annualized information ratio         |      |      |      |      |
| STOXX Asia/Pacific 600 Minimum Variance Unconstrained Index | 0.6                       | 0.6  | 0.6  | 0.6  | 0.6  | -1.7                                 | -1.8 | -1.1 | -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 Jul. 31, 2023

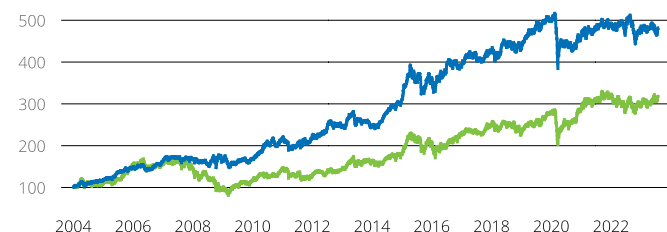
## MINIMUM VARIANCE

# STOXX® ASIA/PACIFIC 600 MINIMUM VARIANCE

### Fundamentals (for last 12 months)

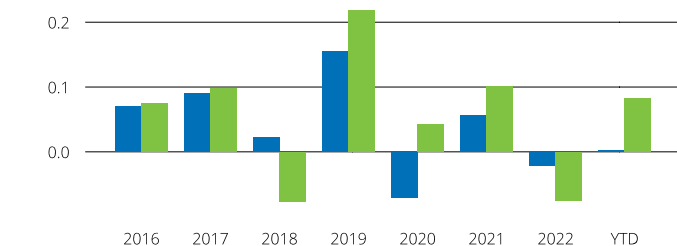
| Index   | Price/earnings<br>incl. negative |           | Price/earnings<br>excl. negative |           | Price/<br>book | Dividend<br>yield (%) <sup>3</sup> | Price/<br>sales | Price/<br>cash flow |
|---|----------------------------------|-----------|----------------------------------|-----------|----------------|------------------------------------|-----------------|---------------------|
|   | Trailing                         | Projected | Trailing                         | Projected | Trailing       | Trailing                           | Trailing        | Trailing            |
| STOXX Asia/Pacific 600 Minimum Variance Unconstrained Index | 13.9                             | 12.9      | 13.3                             | 12.8      | 1.1            | 3.4                                | 1.0             | 0.4                 |
| STOXX Asia/Pacific 600 Index                                | 15.7                             | 15.5      | 14.5                             | 15.3      | 1.5            | 3.0                                | 1.2             | 3.4                 |

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



— STOXX® Asia/Pacific 600 Minimum Variance Unconstrained Index

— STOXX® Asia/Pacific 600 Index



■ STOXX® Asia/Pacific 600 Minimum Variance Unconstrained Index

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### 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 individual capping, effective number of assets, rebalancing and turnover. 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 | CH0180139294 | SAA1UNGR | SAA1UNGR INDEX | .SAA1UNGR |
| Net Return EUR   | CH0180139138 | SAA6UNR  | SAA6UNR INDEX  | .SAA6UNR  |
| Net Return EUR   | CH0180139138 | SAA6UNR  | SAA6UNR INDEX  | .SAA6UNR  |
| Price EUR        | CH0180138973 | SAA6UNP  | SAA6UNP INDEX  | .SAA6UNP  |
| Price EUR        | CH0180138973 | SAA6UNP  | SAA6UNP INDEX  | .SAA6UNP  |
| Gross Return USD | CH0180139773 | SAA1UNGV | SAA1UNGV INDEX | .SAA1UNGV |
| Net Return USD   | CH0180139617 | SAA6UNV  | SAA6UNV INDEX  | .SAA6UNV  |
| Net Return USD   | CH0180139617 | SAA6UNV  | SAA6UNV INDEX  | .SAA6UNV  |
| Price USD        | CH0180139450 | SAA6UNL  | SAA6UNL INDEX  | .SAA6UNL  |
| Price USD        | CH0180139450 | SAA6UNL  | SAA6UNL INDEX  | .SAA6UNL  |

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  | Monthly         |

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 Jan. 02, 2004 to Jul. 31, 2023

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

**MINIMUM VARIANCE****STOXX® ASIA/PACIFIC 600 MINIMUM VARIANCE UNCONSTRAINED INDEX****Top 10 Components<sup>5</sup>**

| <b>Company</b>                 | <b>Supersector</b>       | <b>Country</b> | <b>Weight (%)</b> |
|--------------------------------|--------------------------|----------------|-------------------|
| CLP Holdings Ltd.              | Utilities                | Hong Kong      | 5.75              |
| Singapore Telecommunications L | Telecommunications       | Singapore      | 4.24              |
| MCDONALD'S HOLDINGS            | Travel & Leisure         | Japan          | 4.00              |
| SOFTBANK                       | Telecommunications       | Japan          | 4.00              |
| SembCorp Industries Ltd.       | Utilities                | Singapore      | 3.70              |
| Singapore Airlines Ltd.        | Travel & Leisure         | Singapore      | 3.62              |
| Sun Hung Kai Properties Ltd.   | Real Estate              | Hong Kong      | 3.02              |
| Nissin Foods Holdings Co. Ltd. | Food, Beverage & Tobacco | Japan          | 2.70              |
| KDDI Corp.                     | Telecommunications       | Japan          | 2.66              |
| Oversea-Chinese Banking Corp.  | Banks                    | Singapore      | 2.62              |

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