#### MINIMUM VARIANCE

# 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.

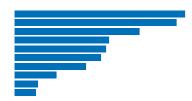
»Two versions - Constrained and Unconstrained - cater to different investor needs.

»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	97.0	0.7	0.3	5.0	0.0	5.1	0.0	60.5
STOXX Asia/Pacific 600 Index	6,861.9	5,729.2	9.5	4.1	159.2	1.1	2.8	0.0	3.4

#### Supersector weighting (top 10)



# 18.2% Food, Beverage & Tobacco 17.3% Telecommunications

13.4% Utilities

10.1% Real Estate 9.8% Travel & Leisure

9.2% Personal Care, Drug & Grocery Stores

7.6% Banks 4.4% Industrial Goods & Services

2.5% Retail

2.3% Health Care

#### **Country weighting**



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

Index returns				R	eturn (%)			Anr	ualized re	:urn (%)
	Last month	YTD	1Y	зү	5Y	Last month	YTD	1Y	3Y	5Y
STOXX Asia/Pacific 600 Minimum Variance Unconstrained Index	-0.5	0.1	-1.9	9.3	6.7	N/A	N/A	-1.9	3.0	1.3
STOXX Asia/Pacific 600 Index	2.4	3.7	0.6	21.7	19.6	N/A	N/A	0.6	6.8	3.7
Index volatility and risk	Annualized volatility (%) Annualized Sharpe						pe ratio²			
STOXX Asia/Pacific 600 Minimum Variance Unconstrained Index	7.6	10.3	10.6	10.4	11.2	N/A	N/A	-0.4	0.3	0.1
STOXX Asia/Pacific 600 Index	9.0	13.4	14.6	14.6	15.1	N/A	N/A	-0.1	0.4	0.2
Index to benchmark		Correlation						Tracking	error (%)	
STOXX Asia/Pacific 600 Minimum Variance Unconstrained Index	0.8	0.8	0.8	0.8	0.8	5.9	7.6	9.3	9.0	8.7
Index to benchmark	Beta Annualized inform					tion ratio				
STOXX Asia/Pacific 600 Minimum Variance Unconstrained Index	0.7	0.6	0.6	0.6	0.6	-5.6	-1.2	-0.4	-0.5	-0.4

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

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



<sup>&</sup>lt;sup>2</sup> Based on EURIBOR1M

# STOXX® ASIA/PACIFIC 600 MINIMUM VARIANCE

#### Fundamentals (for last 12 months)

Index		rice/earnings incl. negative		rice/earnings excl. negative	Price/ book	Dividend yield (%) <sup>3</sup>	Price/ sales	Price/ cash flow
	Trailing	Projected	Trailing	Projected	Trailing	Trailing	Trailing	Trailing
STOXX Asia/Pacific 600 Minimum Variance Unconstrained Index	13.7	12.3	13.2	12.2	1.1	3.4	1.0	0.3
STOXX Asia/Pacific 600 Index	15.1	14.4	13.9	14.3	1.4	2.9	1.1	3.4

#### Performance and annual returns4



STOXX® Asia/Pacific 600 Minimum Variance Unconstrained Index

STOXX® Asia/Pacific 600 Index



STOXX® Asia/Pacific 600 Minimum Variance Unconstrained Index

STOXX® Asia/Pacific 600 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 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

 $Complete\ list\ available\ here: www.stoxx.com/data/vendor\_codes.html$ 

#### **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

STOXX customer support | P +41 43 430 7272 | customersupport@stoxx.com | https://qontigo.com/support/

#### DISCI AIMER

STOXX, Deutsche Brse Group and their licensors, research partners or data providers do not make any warranties or representations, express or implied, with respect to the timeliness, sequence, accuracy, completeness, currentness, merchantability, quality or fitness for any particular purpose of its index data and exclude any liability in connection therewith. STOXX, Deutsche Brse Group and their licensors, research partners or data providers are not providing investment advice through the publication of indices or in connection therewith. In particular, the inclusion of a company in an index, its weighting, or the exclusion of a company from an index, does not in any way reflect an opinion of STOXX, Deutsche Brse Group or their licensors, research partners or data providers on the merits of that company. Financial instruments based on the STOXX® indices or on any other indices supported by STOXX are in no way sponsored, endorsed, sold or promoted by STOXX, Deutsche Brse Group or their licensors, research partners or data providers.

#### **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 May 31, 2023

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

# MINIMUM VARIANCE

# STOXX® ASIA/PACIFIC 600 MINIMUM VARIANCE UNCONSTRAINED INDEX

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

Company	Supersector	Country	Weight (%)	
Hong Kong & China Gas Co. Ltd.	Utilities	Hong Kong	5.14	
MCDONALD'S HOLDINGS	Travel & Leisure	Japan	4.30	
Singapore Telecommunications L	Telecommunications	Singapore	4.01	
SOFTBANK	Telecommunications	Japan	3.92	
Sun Hung Kai Properties Ltd.	Real Estate	Hong Kong	3.17	
KDDI Corp.	Telecommunications	Japan	2.86	
Nissin Foods Holdings Co. Ltd.	Food, Beverage & Tobacco	Japan	2.81	
Yakult Honsha Co. Ltd.	Food, Beverage & Tobacco	Japan	2.62	
POWER ASSETS HOLDINGS LTD	Utilities	Hong Kong	2.52	
Oversea-Chinese Banking Corp.	Banks	Singapore	2.45	

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