STOXX JAPAN 600 MINIMUM VARIANCE

Index description

The STOXX Japan 600 Minimum Variance index weights the components of the underlying STOXX Japan 600 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.).

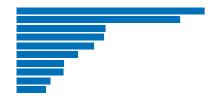
»Capping constraints are applied in accordance with the Undertakings for Collective Investment in Transferable Securities (UCITS) directive to ensure that funds can easily track the index.

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

Descriptive statistics

Index	Market cap (JPY bn.)		Components (JPY bn.)		Component weight (%)		Turnover (%)		
	Full	Free-float	Mean	Median	Largest	Smallest	Largest	Smallest	Last 12 months
STOXX Japan 600 Minimum Variance	N/A	15,864.8	106.5	38.3	1217.1	5.4	7.7	0.0	30.3
STOXX Japan 600	782,559.5	664,289.8	1107.1	385.0	31,118.9	94.4	4.7	0.0	2.5

Supersector weighting (top 10)



20.1% Industrial Goods and Services 17.5% Travel and Leisure

9.5% Telecommunications

9.4% Food, Beverage and Tobacco 8.3% Real Estate

6.6% Utilities

5.1% Technology 5.0% Retail

3.6% Health Care

3.2% Consumer Products and Services

Country weighting

100.0% Japan

Risk and return figures¹

Index returns				F	Return (%)			An	nualized re	turn (%)
	Last month	YTD	1Y	3Y	5Y	Last month	YTD	1Y	3Y	5Y
STOXX Japan 600 Minimum Variance	4.2	18.2	17.3	27.8	31.1	N/A	N/A	17.4	8.6	5.6
STOXX Japan 600	0.3	40.0	21.1	53.6	51.7	N/A	N/A	21.3	15.5	8.8
Index volatility and risk		Annualized volatility (%) Annualized Sharpe						rpe ratio		
STOXX Japan 600 Minimum Variance	N/A	N/A	9.2	10.8	12.5	N/A	N/A	1.4	0.7	0.4
STOXX Japan 600	N/A	N/A	14.0	15.6	16.9	N/A	N/A	1.2	0.9	0.5
Index to benchmark		Correlation Tr					Tracking	error (%)		
STOXX Japan 600 Minimum Variance	0.8	0.8	0.9	0.9	0.9	8.3	8.0	7.9	7.9	7.9
Index to benchmark					Beta			Annuali	zed inform	ation ratio
STOXX Japan 600 Minimum Variance	0.5	0.5	0.6	0.6	0.7	5.1	-1.1	-0.5	-0.9	-0.5

¹ For information on data calculation, please refer to STOXX <u>calculation reference guide</u>.

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

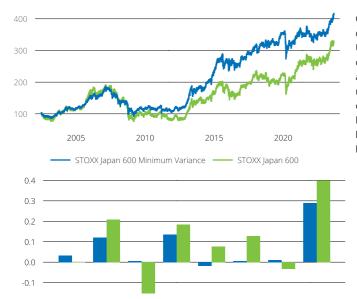


STOXX JAPAN 600 MINIMUM VARIANCE

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
STOXX Japan 600 Minimum Variance	15.7	16.0	13.6	16.0	1.4	2.9	0.8	12.0
STOXX Japan 600	15.2	14.7	14.4	14.6	1.4	2.7	1.0	15.3

Performance and annual returns4



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	JPY	CH0225791828	SA6JMVGF		.SA6JMVGF
Price	EUR	CH0180138080	SA6JMVP		.SXA6JMVP
Net Return	EUR	CH0180138247	SA6JMVR		.SXA6JMVR
Gross Return	EUR	CH0180138403	SA6JMVGR		.XA6JMVGR
Price	USD	CH0180138569	SA6JMVL		.SXA6JMVL
Net Return	USD	CH0180138726	SA6JMVV		.SXA6JMVV
Gross Return	USD	CH0180138882	SA6JMVGV		.XA6JMVGV
Price	JPY	CH0225791786	SA6JMVK		.SA6JMVK
Net Return	JPY	CH0225791802	SA6JMVF	SA6JMVF INDEX	.SA6JMVF

STOXX Japan 600 Minimum Variance STOXX Japan 600

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.

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

CONTACT DETAILS

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

DISCLAIMER

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.

 $^{\rm 3}$ gr. div. yield is calculated as gr. return index return minus price index return

⁴ STOXX data from Jun. 28, 2002 to Aug. 31, 2023

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

STOXX JAPAN 600 MINIMUM VARIANCE

Top 10 Components⁵

Company	Supersector	Country	Weight (%)	
MCDONALD'S HOLDINGS	Travel and Leisure	Japan	7.67	
SOFTBANK	Telecommunications	Japan	7.17	
SKYLARK HOLDINGS	Travel and Leisure	Japan	6.52	
Secom Co. Ltd.	Industrial Goods and Services	Japan	5.07	
Tobu Railway Co. Ltd.	Industrial Goods and Services	Japan	2.96	
YAMADA HOLDINGS	Retail	Japan	2.59	
Chubu Electric Power Co. Inc.	Utilities	Japan	2.43	
Japan Real Estate Investment C	Real Estate	Japan	2.28	
FUJIFILM Holdings Corp.	Technology	Japan	2.14	
Mitsui O.S.K. Lines Ltd.	Industrial Goods and Services	Japan	2.14	

Based on the composition as of Aug. 31, 2023