

STOXX® JAPAN 600 MINIMUM VARIANCE INDEX

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.).

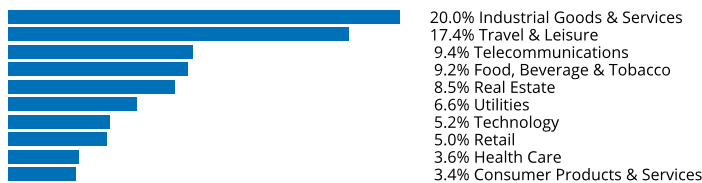
»Capping constraints are applied in accordance with the Undertakings for Collective Investment in Transferable Securities (UCITS) directive to ensure that funds can easily track the index.

»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 Index	N/A	15,230.3	102.2	37.4	1177.1	5.0	7.7	0.0	30.2
STOXX Japan 600 Index	780,007.4	662,534.3	1104.2	374.6	29,522.5	99.3	4.5	0.0	2.6

Supersector weighting (top 10)



Country weighting



Risk and return figures¹

Index returns	Return (%)					Annualized return (%)				
	Last month	YTD	1Y	3Y	5Y	Last month	YTD	1Y	3Y	5Y
STOXX Japan 600 Minimum Variance Index	1.1	13.4	12.4	30.0	24.5	N/A	N/A	12.5	9.2	4.5
STOXX Japan 600 Index	1.4	24.5	22.2	65.7	50.0	N/A	N/A	22.4	18.6	8.6
Index volatility and risk	Annualized volatility (%)					Annualized Sharpe ratio ²				
STOXX Japan 600 Minimum Variance Index	7.2	8.3	9.2	10.9	12.5	N/A	N/A	1.0	0.7	0.4
STOXX Japan 600 Index	12.3	12.9	14.2	15.7	16.9	N/A	N/A	1.3	1.0	0.5
Index to benchmark	Correlation					Tracking error (%)				
STOXX Japan 600 Minimum Variance Index	0.9	0.8	0.9	0.9	0.9	7.2	7.9	7.8	7.8	7.9
Index to benchmark	Beta					Annualized information ratio				
STOXX Japan 600 Minimum Variance Index	0.5	0.5	0.6	0.6	0.7	-0.7	-2.2	-1.2	-1.2	-0.6

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

² Based on EURIBOR1M

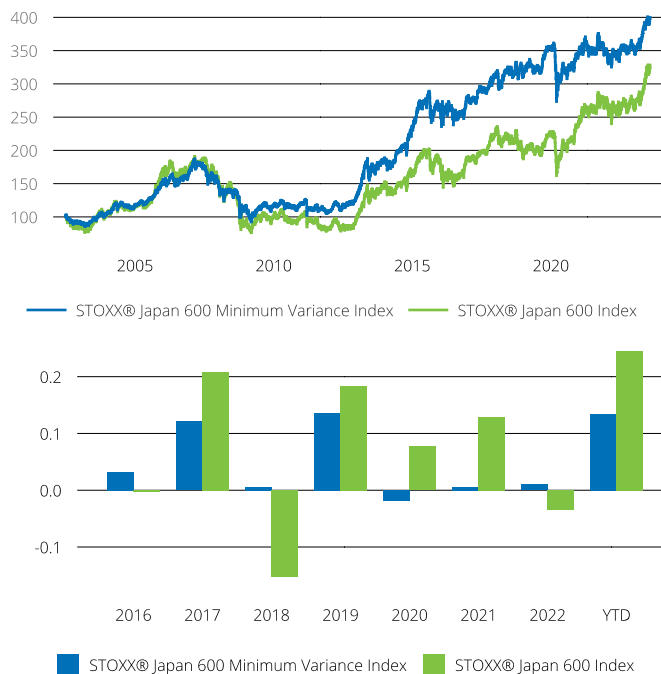
(JPY, gross return), all data as of Jul. 31, 2023

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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
STOXX Japan 600 Minimum Variance Index	14.1	15.9	12.3	15.9	1.3	2.8	0.8	10.1
STOXX Japan 600 Index	15.6	14.9	14.5	14.7	1.4	2.8	1.0	14.2

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 EUR	CH0180138403	SA6JMVGR		.XA6JMVGR
Net Return EUR	CH0180138247	SA6JMVR		.SXA6JMVR
Net Return EUR	CH0180138247	SA6JMVR		.SXA6JMVR
Price EUR	CH0180138080	SA6JMVP		.XA6JMVP
Price EUR	CH0180138080	SA6JMVP		.SXA6JMVP
Gross Return JPY	CH0225791828	SA6JMVGF		.SA6JMVGF
Net Return JPY	CH0225791802	SA6JMVF	SA6JMVF INDEX	.SA6JMVF
Net Return JPY	CH0225791802	SA6JMVF	SA6JMVF INDEX	.SA6JMVF
Price JPY	CH0225791786	SA6JMVK		.SA6JMVK
Price JPY	CH0225791786	SA6JMVK		.SA6JMVK

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.

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.

³ gr. div. yield is calculated as gr. return index return minus price index return

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

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

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Top 10 Components⁵

Company	Supersector	Country	Weight (%)
MCDONALD'S HOLDINGS	Travel & Leisure	Japan	7.73
SOFTBANK	Telecommunications	Japan	7.06
SKYLARK HOLDINGS	Travel & Leisure	Japan	6.13
Secom Co. Ltd.	Industrial Goods & Services	Japan	4.94
Tobu Railway Co. Ltd.	Industrial Goods & Services	Japan	2.90
YAMADA HOLDINGS	Retail	Japan	2.53
Chubu Electric Power Co. Inc.	Utilities	Japan	2.32
Japan Real Estate Investment C	Real Estate	Japan	2.25
FUJIFILM Holdings Corp.	Technology	Japan	2.13
JAPAN POST BANK	Banks	Japan	2.12

⁵ Based on the composition as of Jul. 31, 2023