

## Nikkei Stock Average Volatility Index FactSheet

The Nikkei Stock Average Volatility Index indicates the expected degree of fluctuation of the Nikkei stock Average in the future. The greater the index values are, the larger fluctuation investors expect in the market.

### ■(Underlying index)

The Nikkei Stock Average Volatility Index signals the expected volatility of the Nikkei 225 in one month period.

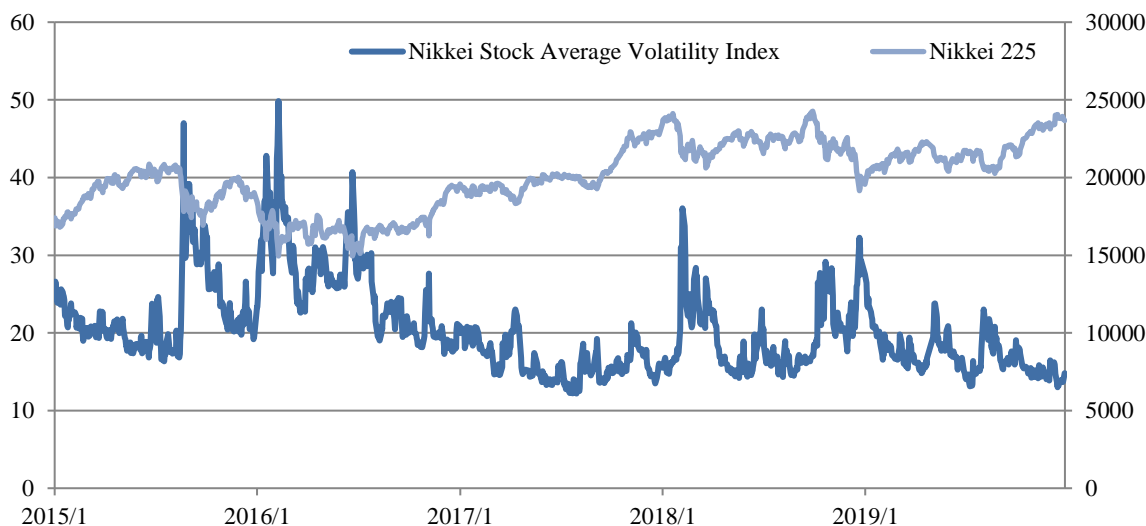
### ■(Calculation method)

The Nikkei Stock Average Volatility Index are calculated by using prices of Nikkei 225 futures and Nikkei 225 options on the Osaka Exchange (OSE). In the calculation, taking near-term future price as the basis of ATM, the volatility of near-term option and next-term option are calculated with OTM option prices of each delivery month. Then, the index value is calculated by linear interpolation or linear extrapolation between the volatilities of each delivery month to make the time to expiration as 30 days.

### ■(Base date)

The commencement date of the calculation was November 19, 2010, which had been retroactively calculated in the past on the end-of-day basis, to Jun 12th, 1989. The index is currently calculated every 15 seconds during the day session of the Nikkei 225 options on the OSE.

### ■ Graph (Dec/30/2019)



### ■ Performance (Dec/30/2019)

	Annual Return(%)				Annualized Returns (%)		Annualized Standard Deviation(%)		
	2015	2016	2017	2018	2019	3 years	5 years	3 years	5 years
Nikkei Stock Average Volatility Index	-26.14	8.73	-24.28	82.91	-49.52	-11.25	-10.90	64.09	76.24
Nikkei 225	9.07	0.42	19.10	-12.08	18.20	7.37	6.27	13.88	16.15

### ■ Vendor Code

QUICK	145
Bloomberg	VNKY
THOMSON REUTERS	.JNIV

### ■ Reference

Please refer to the "Index Guidebook" for the detail of the calculation method or constituents selection rules.

→(URL) <https://indexes.nikkei.co.jp/>

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