《Press Release》

a sample translation
original release in Japanese

November 8, 2010

Nikkei To Launch Volatility Index on Nikkei Stock Average

Nikkei Inc. will launch the Nikkei Stock Average Volatility Index based on the Nikkei Stock Average (Nikkei 225) on November 19, 2010.

The Nikkei Stock Average Volatility Index indicates the expected degree of fluctuation of the stock market in the future. Using the option prices on the Nikkei 225 listed on the Osaka Securities Exchange, the index signals the volatility of the Nikkei 225 in one month period.. The greater its figures are, the more volatile investors expect, which means the higher level of uncertainty in the market. (See the Appendix for the details of the calculation)

Under turbulent economic circumstances, there have been more situations where the stock markets have fluctuated more drastically for the past several years. With such situations, market participants became interested in the volatility index that estimates the degree of stock market fluctuation in the future. Especially the Chicago Board Options Exchange (CBOE) Volatility Index, VIX (on the S&P 500 Index) in the US and the VDAX (VDAX-New) volatility index (on the DAX index) provided by Deutsche Börse in Germany have become widely known among investors, and these volatility indices attracted much more attention in the stock markets because they surged up to the unprecedented level when the stock prices plunged due to the Lehman's fall in 2008

Also in Japan, there has been considerable discussion upon the need for an original index that shows the stock market fluctuation through investors' sentiment. Nikkei determined to calculate and publish the Nikkei Stock Average Volatility Index corresponding to such requests from the market participants.

In developing the Nikkei Stock Average Volatility Index, Nikkei has gained the cooperation of Quantitative Research Center of Nomura Securities CO., LTD. The new index will be calculated daily, at the end of the market basis.

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Description of Nikkei Stock Average Volatility Index

§ Name of the index

Nikkei Stock Average Volatility Index

§ Basic concept

Prices of the options are usually determined, among others, by the volatility of its underlying asset. In other words, the prices (premiums) of the options are based on the future level of the volatility expected by the buyers and sellers of such options. It is common to indicate such volatility as an estimate for the following thirty days. In the calculation of the volatility index, the volatility expected by the investors is inversely calculated from the option prices in the market.

When the options are traded at higher prices and at wider variety of strike prices, we anticipate that the market participants estimate its underlying asset value in varied ways in the future. The Nikkei Stock Average Volatility Index is designed to make its value greater in such cases.

§ Formula: how to calculate the index

The index value is calculated daily, end-of-day basis using the prices of the options on the Nikkei Stock Average (Nikkei 225) traded on the Osaka Securities Exchange, in accordance with the procedures described below. The options to calculate the index are rolled to the next delivery month on three business days before the last trading day of the near month.

①Calculate the volatility σ_1 based on the near-term (the first-term) option and the volatility σ_2 based on the next-term (the second-term) option

$$\sigma_i = \sqrt{\frac{1}{T_i / 365}\left(1 + \frac{L_i T_i}{360}\right)\sum_{j=0}^{n}\left(\frac{V\left(X_{i,j}, T_i\right)}{X_{i,j}^{\ 2}} + \frac{V\left(X_{i,j+1}, T_i\right)}{X_{i,j+1}^{\ 2}}\right)\Delta X_{i,j}}$$

$X_{i,j}$: jth lowest Strike price (i.e. ascending order) of i th-term option

$V\left(X_{i,j}, T_i\right)$: Option price with time to expiration of T_i and Strike price of $X_{i,j}$ (*)

$\Delta X_{i,j} = X_{i,j+1} - X_{i,j}$

L_i : Euroyen LIBOR(360 days basis) on the previous business day

(*):Use the prices of put option in case that the strike prices are equal to or less than the near-term future prices, and use the prices of the call option in case that the strike prices are greater than the future prices, i.e. use the out-of-the-money option prices

② Obtain the index value by linear interpolation or linear extrapolation of σ_1 and σ_2 to make the time to expiration one month (30 days),

$$\text{Index value} = \sqrt{\frac{1}{30}\left(\frac{(30 - T_1)T_2}{T_2 - T_1}\sigma_2{}^2 + \frac{(T_2 - 30)T_1}{T_2 - T_1}\sigma_1{}^2\right)} \times 100$$

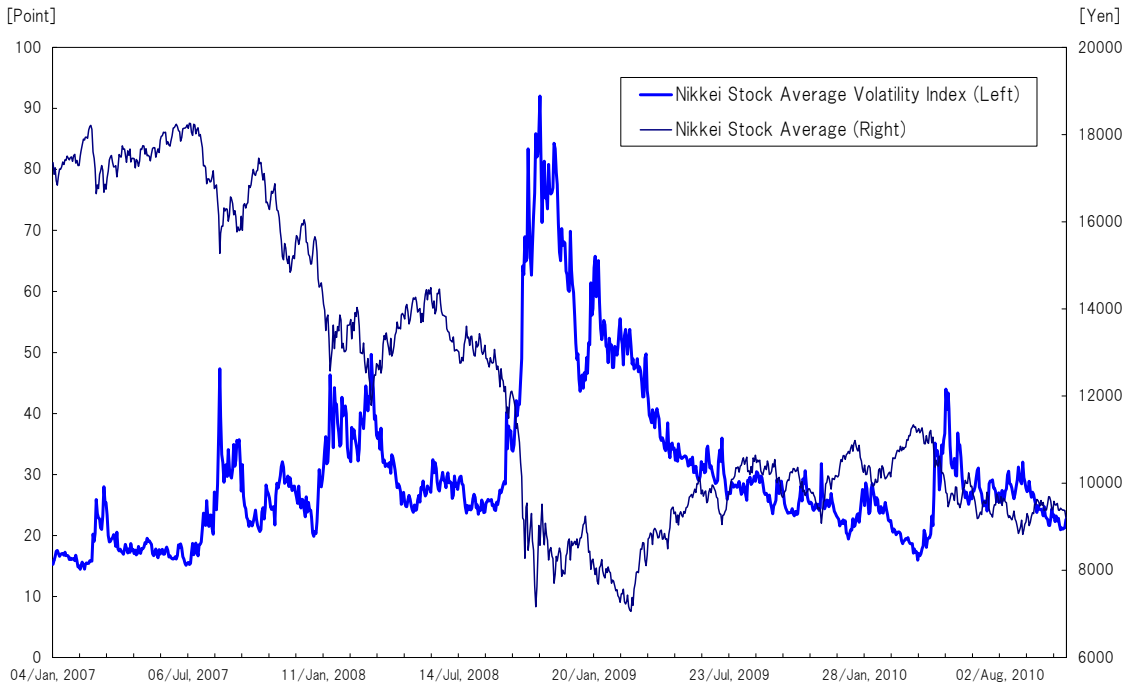
§ Unit of the index value and its interpretation

The index is expressed with two decimal places and its unit is "points". The index value describes the degree of the fluctuation of the Nikkei 225 for the following thirty days (one month). Because the value is converted to the annualized rate, the index value of 20 points for instance is equivalent to approximately 5.8 points on the monthly basis, which indicates one-month rate of change in the Nikkei 225 is expected to be between minus 5.8% and plus 5.8 % approximately 68%.of the time, i.e. probability of 68%.

§ Retroaction for the past

The Nikkei Stock Average Volatility Index will replace the Nikkei Stock Average implied volatility that has been calculated and published since June 1989, and publication of the implied volatility will be ceased with the launch of the new index. Nikkei plans to calculate the new index retroactively back to June 12, 1989 when the implied volatility commenced to be calculated. The graph on the next page describes the movement of the index calculated back to the beginning of 2007.

Nikkei Stock Average Volatility index since 2007



This English document is a sample translation from the original document in Japanese

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