# Description of Nikkei 225 Total Return Index

### §Basic Concept of the index

This index measures the performance of the Nikkei 225 that includes both movements in the index level and reinvestment of dividend incomes from its component stocks. It is designed to indicate the performance of Nikkei 225 including reinvestment of all received dividends with its component weights on the ex-dividend dates.

The index value on a day is calculated by multiplying the index value on the previous day by the return of the Nikkei 225 including dividends. Daily returns of the Nikkei 225 Total Return are usually identical to those of the Nikkei 225 on other days than the ex-dividend dates, or on the ex-dividend days without dividend receipts.

# §Dividend Adjustment

It is common for Japanese companies to fix the amount of dividends paying to their shareholders after the ex-date, which means Japanese companies do not fix the dividends on the ex-date. Therefore estimated dividends are used for the index calculation on the ex-date. The difference between the estimated dividend and the actual dividend reflects the index on the next business day when the dividend is fixed. The timing to fix the dividends is the same as that for the calculation of the "Nikkei Stock Average DP Index" (i.e. on the dates of annual regular shareholder meetings in case of the annual dividends/ on the dates of the publication by the companies in case of the other dividends). The estimated dividend figures published by Nikkei are used for the calculation.

#### §Index calculation method

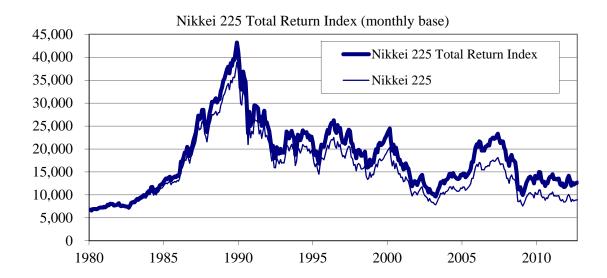
The index value is calculated on the end-of-day basis as follows. The value on December 28, 1979, its inception date was 6569.47, equal to the closing price of the Nikkei 225 (price index) on the day.

$$Index\ Value_t = Index\ Value_{t-1}$$

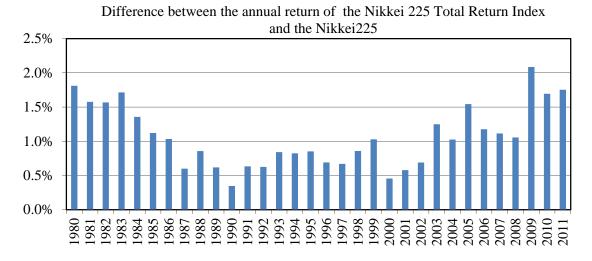
$$\times \frac{Nikkei\ 225_t + Estimated\ Ex-Dividend_t + Dividend\ Adjustment_t}{Nikkei\ 225_{t-1}}$$

Estimated Ex-Dividend indicates the ex-dividend amount of the Nikkei 225, calculated based on the estimated dividend incomes from its constituents on the ex-date. The figure is equal to zero on other days than the ex-dividend date. Dividend Adjustment represents adjustment value, calculated after the ex-date based on the difference between the actual dividend and the estimated dividend for the each constituent. The value is equal to zero on other days than the adjustment date.

### §Features of the index



Comparing the differences between returns of the Nikkei 225 Total Return Index and those of the Nikkei 225 (price index) historically could clarify the dividend effects of the investment, i.e. how much of impacts the dividend incomes have had on the performances.



Please visit <u>here</u> to download the monthly data for the past 10 years and read <u>Index</u> <u>Guidebook</u> of the Nikkei 225 Total Return Index to obtain more detailed information such as the index calculation method.

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

# **Contact**

Index Business Office, Nikkei Inc.

Tel: +813-6256-7341, mail: index@nex.nikkei.co.jp