

June 17, 2022
Index Business Office
Nikkei Inc.

FAQ for Index Consultation Regarding the Introduction of the “Weight cap” on the constituents of the Nikkei Stock Average, and others (update on June 17)

Nikkei conducts the above consultation from May 23 to June 27. This FAQ is prepared to answer the questions supposed to be asked frequently and was updated by new questions received after the first version was released. The additions are underlined. Refer to these questions when you need clarification while responding to the consultation.

Q1: Why does Nikkei introduce the weight cap?

A1: Nikkei Stock Average (Nikkei 225) is a representative Japanese equity market index and has a role as a yardstick of the market. It should not be heavily influenced by the price fluctuations of a specific stock. It is a common understanding that diversification effect is hampered and the volatility is increased in investment funds if some constituents have too much weight in the portfolio. For this reason, many of the indexes and the fund management rules are equipped with the weight cap feature. TOPIX, another index for the Tokyo market introduced the weight cap of 10% from April 2022. Nikkei decided to introduce the weight cap under such circumstances to improve the quality as a yardstick of the market and in consideration of the comments received in our index consultation last year.

Q1-2: Why is the capping ratio introduced in addition to the price adjustment factor?

A1-2: The capping ratio is a number which is used to temporarily decrease the weight of a constituent when such weight exceeds a certain level. As adjusting the price by the weight cap is a temporary measure to maintain the quality as a yardstick of the market, we have decided to set the capping ratio only for stocks to which the weight cap is applied.

Q2: Why is the initial weight cap threshold set as 12% and decreased to 10% in steps?

A2: At the time of introduction, no constituent weight will exceed the weight cap

threshold. To make the stakeholders fully understand and informed of the weight cap rules, Nikkei decided to implement the feature in steps. Starting from 12%, the threshold will be decreased to the target of 10% in 2 years.

Q3: Why is the final weight cap threshold set as 10%?

A3: An appropriate level of the maximum weight for an index may be different depending on the number / size of its constituents and the method of calculation. Considering the growth margin of the constituents as well as quality of the index as a yardstick of the market, after careful examinations, Nikkei decided to choose 10%. Nikkei also considered the fact that 10% is the maximum weight in the guideline regarding the credit risks compiled by the Investment Trusts Association, Japan as well as the upper limits of other major indexes and comments from the index consultation in 2021.

Q4: Why is the capping ratio not raised before it declines under 5%?

A4: If the capping ratio is decreased immediately after the weight of a constituent becomes lower than the weight cap threshold, there will be a chance that the capping ratio is applied and cancelled frequently. To avoid frequent changes, low enough level of weight is chosen considering with the past price fluctuations of the constituent stocks.

Q5: Why isn't the weight of a constituent decreased to the threshold level at once?

A5: When a capping ratio is applied, the weight of such a constituent is expected to decline. Financial products such as index funds need to sell a portion of such a stock from the portfolio. Generally, for the indexes which use weight cap, weight of a constituent is decreased to the threshold level at once. However, if a constituent price surges highly above the weight cap threshold and such weight is decreased to the threshold level directly, sharp decline in the weight may result in huge trading in the market. By decreasing the weight by 0.1 at a time, the impact on the market is expected to be mitigated. On the base date of the next and subsequent periodic reviews, if the weight of the constituent is still above the threshold, the capping ratio will continue to be decreased by 0.1 upon periodic reviews.

Q6: How are the constituents to which the capping ratio are applied treated in the calculation?

A6: Currently, the Nikkei 225 is calculated as a sum of prices adjusted by the price adjustment factor (PAF) divided by the divisor. Under the new rule, prices are adjusted by capped PAF for constituents to which the capping ratio are applied. Following is an example when the capping ratio of 0.9 is applied to a constituent which PAF is 1.

Capped PAF is calculated first.

Capped PAF = PAF (1) x Capping ratio (0.9) = 0.9

Note: 2nd digit after the decimal is rounded down, if any.

Capped PAF is used to adjust the price of a constituent (provided that the price of a constituent which does not exceed the threshold is adjusted by PAF).

Adjusted price = stock price x Capped PAF (0.9)

When the capping ratio of 0.9 is applied to a constituent whose PAF is 0.8, Capped PAF will be 0.7 ($0.8 \times 0.9 = 0.72$, 2nd digit after the decimal is rounded down).

Q7: Why is the capping ratio revised when constituents go for large-scale stock split or reverse split and the price adjustment factor is changed accordingly?

A7: Consider a case where a constituent with the price adjustment factor of 0.8 and the capping ratio of 0.9 goes for 1 to 5 stock split. The pre-split capped price adjustment factor is 0.7 ($0.8 \times 0.9 = 0.72$, 2nd digit after the decimal is rounded down).

The rule stipulates that, under large-scale stock split, the price adjustment factor is revised in line with the ratio of the split. In this case, post-split price adjustment factor (uncapped) will be 4 (0.8×5), which will yield new capped price adjustment factor of 3.6 (4×0.9). However, to keep the adjusted price of the constituent unchanged after the split, capped price adjustment factor shall be 3.5 (pre-split capped price adjustment factor 0.7 x ratio of split 5). This means the capping ratio shall be 0.875 ($4 \times 0.875 = 3.5$) instead of the original 0.9.

New capping ratio is calculated backward from post-split capped price adjustment factor and the post-split price adjustment factor.

Q8: When does Nikkei announce the application, revision, or cancellation of the capping ratio?

A8: Nikkei announces them together with the result of the periodic review, which is to be conducted twice a year in April and October as proposed in this consultation. There is no fixed date of the announcement of the result of the periodic review stipulated by the methodology. However, for the October reviews in the past, the results were typically announced in early September. Nikkei announces them well before the effective date so that the stakeholders are fully informed and have time to prepare. In the list of “Price Adjustment Factor” published on the official index website “Nikkei Indexes”, a capped price adjustment factor will be listed for stocks to which the weighted cap is applied instead of a price adjustment factor.

Q9: Why does Nikkei increase the frequency of the periodic review?

A9: To keep the constituents highly liquid and to reflect the changes in the industrial structure, Nikkei reviews and reshuffles the constituents periodically. By increasing the frequency of the periodic review to twice a year while keeping the maximum number of the constituent reshuffled to 3 at a time, it is aimed to promptly respond to the changes with limited impact on the market.

Q10: What is the difference between the “magnitude of price fluctuation by (trading) volume” and the “magnitude of price fluctuation by trading value”

A10: Both indicators are intended to measure the price change triggered by the trading. Namely, high/low price (price fluctuation) is standardized by the size of trading. As such, it is assumed that the smaller number indicates the higher liquidity. The measure of the size of trading will be changed from volume to trading value to better align with recent market standard. The meaning of the indicator is not changed in terms of measuring stability in the stock price moves.

Q11: Will the ranking be severely affected by the change of the liquidity measure?

A11: Since a measure of liquidity changes, it may influence the resulting ranking. However, liquidity ranking at periodic reviews are also affected by the scope of historical

data. As the meaning of the liquidity measure in terms of stability in the stock price moves does not change, the methodology to access liquidity is unchanged.

Should you have other questions, please forward them from the following form. Choose “Index Consultation” from the menu.

https://www1.entryform.jp/nikkei_indexes_contact_en/