

Nikkei-JPX Leveraged Index
Nikkei-JPX Inverse Index
Index Guidebook

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Nikkei, Inc. (Nikkei)

1. Concept

The Nikkei-JPX Leveraged Indexes represent the doubled performance of the Nikkei- JPX Commodity Index and the Nikkei-JPX Commodity Sub Indexes (hereinafter “base index(es)”), and the Nikkei-JPX Inverse Indexes represent the inverse performance of the base indexes.

For instance, if a base index rises by 5% from the base index calculated from the settlement price of each component (hereinafter “settlement base index(es)”) of the previous day, the corresponding Nikkei-JPX Leveraged Index rises by 10% over the same period and the corresponding Nikkei-JPX Inverse Index falls by 5%. Similarly, if a base index falls by 5% from the settlement base index of the previous day, the corresponding Leveraged Index falls by 10% over the same period and the corresponding Inverse Index rises by 5%.

2. The Indexes and the Underlying Base Indexes

(1) Nikkei-JPX Leveraged Indexes

Index	Base Index	Base Date	Start Date of Calculation
Nikkei-JPX Leveraged Commodity Index	Nikkei-JPX Commodity Index	December 30, 2009	December 3, 2012
Nikkei-JPX Leveraged Nearby Month Commodity Index	Nikkei-JPX Nearby Month Commodity Index	December 30, 2009	December 3, 2012
Nikkei-JPX Leveraged Industrial Commodity Index	Nikkei-JPX Industrial Commodity Index	November 29, 2013	September 20, 2016
Nikkei-JPX Leveraged Precious Metals Index	Nikkei-JPX Precious Metals Index	December 30, 2009	December 3, 2012
Nikkei-JPX Leveraged Oil Index	Nikkei-JPX Oil Index	December 30, 2009	December 3, 2012
Nikkei-JPX Leveraged Agricultural Product Index	Nikkei-JPX Agricultural Product Index	November 29, 2013	September 20, 2016
Nikkei-JPX Leveraged Gold Index	Nikkei-JPX Gold Index	December 30, 2009	December 3, 2012
Nikkei-JPX Leveraged Silver Index	Nikkei-JPX Silver Index	December 30, 2009	December 3, 2012

Nikkei-JPX Leveraged Platinum Index	Nikkei-JPX Platinum Index	December 30, 2009	December 3, 2012
Nikkei-JPX Leveraged Palladium Index	Nikkei-JPX Palladium Index	December 30, 2009	December 3, 2012
Nikkei-JPX Leveraged Gasoline Index	Nikkei-JPX Gasoline Index	December 30, 2009	December 3, 2012
Nikkei-JPX Leveraged Kerosene Index	Nikkei-JPX Kerosene Index	December 30, 2009	December 3, 2012
Nikkei-JPX Leveraged Crude Oil Index	Nikkei-JPX Crude Oil Index	December 30, 2009	December 3, 2012
Nikkei-JPX Leveraged Rubber Index	Nikkei-JPX Rubber Index	December 30, 2009	December 3, 2012
Nikkei-JPX Leveraged Soybean Index	Nikkei-JPX Soybean Index	November 29, 2013	September 20, 2016
Nikkei-JPX Leveraged Azuki Index	Nikkei-JPX Azuki Index	November 29, 2013	September 20, 2016
Nikkei-JPX Leveraged Corn Index	Nikkei-JPX Corn Index	November 29, 2013	September 20, 2016

* The indexes listed above are collectively referred to as the “Nikkei-JPX Leveraged Indexes.”

(2) Nikkei-JPX Inverse Indexes

Index	Base Index	Base Date	Start Date of Calculation
Nikkei-JPX Inverse Commodity Index	Nikkei-JPX Commodity Index	December 30, 2009	December 3, 2012
Nikkei-JPX Inverse Nearby Month Commodity Index	Nikkei-JPX Nearby Month Commodity Index	December 30, 2009	December 3, 2012
Nikkei-JPX Inverse Industrial Commodity Index	Nikkei-JPX Industrial Commodity Index	November 29, 2013	September 20, 2016
Nikkei-JPX Inverse Precious Metals Index	Nikkei-JPX Precious Metals Index	December 30, 2009	December 3, 2012
Nikkei-JPX Inverse Oil Index	Nikkei-JPX Oil Index	December 30, 2009	December 3, 2012

Nikkei-JPX Inverse Agricultural Product Index	Nikkei-JPX Agricultural Product Index	November 29, 2013	September 20, 2016
Nikkei-JPX Inverse Gold Index	Nikkei-JPX Gold Index	December 30, 2009	December 3, 2012
Nikkei-JPX Inverse Silver Index	Nikkei-JPX Silver Index	December 30, 2009	December 3, 2012
Nikkei-JPX Inverse Platinum Index	Nikkei-JPX Platinum Index	December 30, 2009	December 3, 2012
Nikkei-JPX Inverse Palladium Index	Nikkei-JPX Palladium Index	December 30, 2009	December 3, 2012
Nikkei-JPX Inverse Gasoline Index	Nikkei-JPX Gasoline Index	December 30, 2009	December 3, 2012
Nikkei-JPX Inverse Kerosene Index	Nikkei-JPX Kerosene Index	December 30, 2009	December 3, 2012
Nikkei-JPX Inverse Crude Oil Index	Nikkei-JPX Crude Oil Index	December 30, 2009	December 3, 2012
Nikkei-JPX Inverse Rubber Index	Nikkei-JPX Rubber Index	December 30, 2009	December 3, 2012
Nikkei-JPX Inverse Soybean Index	Nikkei-JPX Soybean Index	November 29, 2013	September 20, 2016
Nikkei-JPX Inverse Azuki Index	Nikkei-JPX Azuki Index	November 29, 2013	September 20, 2016
Nikkei-JPX Inverse Corn Index	Nikkei-JPX Corn Index	November 29, 2013	September 20, 2016

* The indexes listed above are collectively referred to as the “Nikkei-JPX Inverse Indexes”

3. Calculation Methods

(1) Fundamentals

- The unit of the index value is “points” and the figure is rounded to the second decimal.
- The base index value is set at 10,000.00 points as of base date.

(2) Formula

1) Nikkei-JPX Leveraged Index Series

$$\text{Lev.Index}_{t,d} = \text{Lev.Index}_{s,d-1} \times \max \left[\left\{ 1 + 2 \times \left(\frac{\text{Index}_{t,d}}{\text{Index}_{s,d-1}} - 1 \right) \right\}, 0.1 \right]$$

Where;

$\text{Lev.Index}_{t,d}$ is: the value of the Nikkei-JPX Leveraged Index calculated from the value of the base index observed at time “t” on day “d”.

$\text{Lev.Index}_{s,d-1}$ is: the value of the Nikkei-JPX Leveraged Index calculated from the value of the settlement base index on day “d-1”.

$\text{Index}_{t,d}$ is: the value of the base index at time “t” on day “d”. (NB: The value of $\text{Index}_{t,d}$ is calculated using the base settlement index when the settlement price of each component is fixed after closing of a day session)

$\text{Index}_{s,d-1}$ is: the value of the settlement base index on day “d-1”.

2) Nikkei-JPX Inverse Index Series

$$\text{Inv.Index}_{t,d} = \text{Inv.Index}_{s,d-1} \times \max \left[\left\{ 1 - 1 \times \left(\frac{\text{Index}_{t,d}}{\text{Index}_{s,d-1}} - 1 \right) \right\}, 0.1 \right]$$

Where;

$\text{Inv.Index}_{t,d}$ is: the value of the Nikkei-JPX Inverse Index calculated from the value of the base index observed at time “t” on day “d”.

$\text{Inv.Index}_{s,d-1}$ is: the value of the Nikkei-JPX Inverse Index calculated from the value of the settlement base index on day “d-1”.

$\text{Index}_{t,d}$ is: the value of the base index at time “t” on day “d”. (NB: The value of $\text{Index}_{t,d}$ is calculated using the base settlement index when the settlement price of each component is fixed after closing of a day session)

$\text{Index}_{s,d-1}$ is: the value of the settlement base index on day “d-1”.

4. Treatment of the Index Value

(1) Publication of the Indexes

Japan Exchange Group, Inc. (“JPX”), Osaka Exchange, Inc. (“OSE”) and Tokyo Commodity Exchange, Inc. (“TOCOM”) (JPX, OSE and TOCOM hereinafter collectively referred to as “JPX Group”) and Nikkei Inc. (“Nikkei”) calculate the Nikkei-JPX Leveraged Index and the Nikkei-JPX Inverse Index, using the base settlement index and publicized once a day.

(2) Retroactive calculation of past index value

The past index values of the Nikkei-JPX Leveraged Indexes and the Nikkei-JPX Inverse Indexes have been calculated retroactively back from the start date of calculation to the base date of these indices.

(3) Modification of the index value

If the base index used to calculate the Nikkei-JPX Leveraged Indexes and the Nikkei-JPX Inverse Indexes are modified retroactively, these indices may also be modified likewise.

5. Others

(1) Index License

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In addition, the above-mentioned disclaimers also apply to the base index which is used to calculate the Nikkei-JPX Leveraged Indexes and the Nikkei-JPX Inverse Indexes.

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(3) Contact

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