

(Reference Translation)

# Tokyo Stock Exchange Leveraged and Inverse Index Guidebook

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# Record of Changes

DATE	Changes
2023/2/13	* Added revisions with regard to the business transfer to JPXI (applied on April 1, 2022 retroactively)
2023/7/3	* Added Tokyo Stock Exchange REIT Leveraged (2x) Index, Tokyo Stock Exchange REIT Inverse (-1x) Index and Tokyo Stock Exchange REIT Double Inverse (-2x) Index
2025/1/31	*Changes to unify terminology in each calculation methodology

# 1 . Introduction

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- Based on the stock indices calculated by JPX Market Innovation & Research, Inc. (JPXI), JPXI calculates and distributes indices that apply leverage effects to the base indices (hereinafter the "TSE Leveraged Indices") and indices that reflect the opposite trend of the base indices (hereinafter the "TSE Inverse Indices") in accordance with, as a rule, the methods described in this document. When an event that is not specified in this document occurs, or if JPXI decides it is impossible to use the methods described in this document, the TSE may use an alternative method of index calculation as it deems appropriate.
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## 2. Outline

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### (1) Outline

- TSE Leveraged Indices apply a positive multiple to the daily rate of return of the base index, and are designed to act as indicators for leveraged investment in each base index.
- TSE Inverse Indices apply a negative multiple to the daily rate of return of the base index, and are designed to act as indicators for investments that move inversely (or a multiple of inverse movement) to the base index.

### (2) Leveraged and Inverse Base Indices

Base Indices are as below:

- TOPIX (Tokyo Stock Price Index)
- Tokyo Stock Exchange REIT Index

### 3. Calculation Method

For the changes of the Number of shares for index calculation and Base Market Value, the “Index Calculation Guidebook” is applied and uses the same data for Base Indices. The same is also applied to the prices for index calculation.

#### (1) TSE Leveraged Indices

- TSE Leveraged Indices apply a positive multiple to the daily rate of return\*\*\* of the base index using the below formula.

**Current Day Index Value = Previous Day Index Value \* (1 + N \* % Base Index return from previous day)**

- Base Indices, leverage rates, base dates and base values are as below:

Index Name	Base Index	Leverage Rate (N)	Base Date	Base Value
TOPIX Leveraged (2x) Index	TOPIX(Tokyo Stock Price Index)	2	December 30, 2011	10000 points
Tokyo Stock Exchange REIT Leveraged (2x) Index	Tokyo Stock Exchange REIT Index	2	December 7, 2018	10000 points

\*\*\* round off to two decimal places

#### (2) TSE Inverse Indices

- TSE Inverse Indices apply a negative multiple to the daily rate of return\*\*\* of the base index using the below formula.

**Current Day Index Value = Previous Day Index Value \* (1 - N \* % Base Index return from previous day)**

- Base Indices, leverage rates, base dates and base values are as below:

Index Name	Base Index	Leverage Rate (N)	Base Date	Base Value
TOPIX Inverse (-1x) Index	TOPIX(Tokyo Stock Price Index)	1	December 30, 2011	10000 points
TOPIX Double Inverse (-2x) Index	TOPIX(Tokyo Stock Price Index)	2	December 30, 2011	10000 points
Tokyo Stock Exchange REIT Inverse (-1x) Index	Tokyo Stock Exchange REIT Index	1	December 7, 2018	10000 points

Index Name	Base Index	Leverage Rate (N)	Base Date	Base Value
Tokyo Stock Exchange REIT Double Inverse (-2x) Index	Tokyo Stock Exchange REIT Index	2	December 7, 2018	10000 points

\*\*\* round off to two decimal places

## 4. Others

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### (1) Distribution of Index Values

- The index values of TSE Leveraged Indices, etc. are distributed in real-time (15 second intervals) through the Market Information System to securities companies, news media, and other institutions all over the country.

### (2) Licensing

- JPXI and/or its affiliates reserve all calculation, distribution, publication, usage, and other rights pertaining to TSE Leveraged Indices, etc. Because of this, the use of TSE Leveraged Indices, etc. in the composition and/or sale of financial products such as funds or linked bonds (including its use as the basis for options, swaps, warrants, or other OTC derivatives) requires a license from JPXI.
- A license from JPXI is also required for the provision, distribution, etc. of TSE Leveraged Indices, etc. to third parties.

### (3) Contact

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