

BIST LEVERAGED AND SHORT INDICES METHODOLOGY



BORSA
İSTANBUL

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1. ~~DEFINITION~~INTRODUCTION

1.1. Purpose

~~The objective of BIST Leveraged Indices is created to reflect~~ show the return of a reference index (underlying index) by multiple of the leverage factor in the same direction. This means that, if the leverage factor is 2, leveraged index will increase %2 ~~in return for every %1 increase in the underlying index, increases %1 and leveraged index will decrease by %2 in return for the every %1 decrease in the underlying index decreases %1.~~

It is assumed that, leverage is obtained by borrowing money and investing more in underlying index. The borrowing costs of the leverage is supposed to be on daily repo interest rates. Thus, the index is calculated by deducting the borrowing cost (return on BIST-KYD Repo (Net) Index) from the return on underlying index.

~~The objective of BIST Short Indices is created to reflect~~ show the return of a reference index (underlying index) by multiple of the leverage factor in the opposite direction. This means that, if leverage factor is -2, short index will increase %2 ~~in return for every %1 decrease in the underlying index, decreases %1 and short index will decrease by %2 in return for every %1 increase in the underlying index increases %1.~~

It is assumed that, short position is obtained by borrowing equities in underlying index, selling them short, and investing the fund generated, in repo. Thus, the index is calculated by adding the return on lending (BIST-KYD Repo (Net) Index) to the return on underlying index.

1.2. Administration

Borsa İstanbul is the owner of the intellectual property rights of all indices calculated under this Methodology and as the administrator with full control, is responsible for all processes related to the creation, calculation and publication of these indices and their compliance with the "Principles for Financial Benchmarks" of the International Organization of Securities Commissions (IOSCO). Information on the compliance of the Financial Benchmarks calculated by Borsa İstanbul with the principles of IOSCO can be accessed from the Borsa İstanbul corporate website, [Indices - Compliance with IOSCO Principles](#) page. Borsa İstanbul Index Directorate carries out the works and operations to ensure the continuity of BIST Leveraged and Short Indices.

1.3. Financial Benchmarks Committee

Financial Benchmarks Committee formed and appointed by Borsa İstanbul for the sake of development of opinions and proposals on all and any issues that may be included in the scope of control and oversight of Financial Benchmarks, in order to perform the control and oversight functions described in Article 8 "Control Framework" and Article 9 "Internal Oversight" of Borsa İstanbul A.Ş. Directive on Financial Benchmarks Compliant with IOSCO Principles.

Financial Benchmarks Committee provides governance and internal oversight in regarding all aspects of Financial Benchmark determination activity. Duties and responsibilities of the Financial Benchmarks Committee are basically comprised of determination and announcement of Financial Benchmarks, and creation of Financial Benchmarks, and determination of Methodology, and calculation of Financial Benchmarks, and publishing and dissemination of Financial Benchmarks, and conduct of related operations for reporting and submission to the Decision-making Body referred to in Article 4 of Borsa İstanbul A.Ş. Financial Benchmarks Management Procedure. The Committee gathers at least once every four months. Duties, responsibilities and the membership structure of Financial Benchmarks Committee are stated in Article 5 of Borsa İstanbul A.Ş. Financial Benchmarks Management Procedure. All practices can be accessed from the Borsa İstanbul corporate website, [Indices - Compliance with IOSCO Principles](#) page.

1.4. Changes to the Index Methodology

Borsa İstanbul has implemented a governance and oversight structure with committees and policies to review the Methodology and conduct consultations with Stakeholders as needed.

The Methodology is regularly reviewed by Financial Benchmarks Committee to ensure that it continues to best reflect the change that each index aims to measure.

Needs for revision in the Methodology may arise as a result of change requests from Subscribers or Stakeholders and periodic or non-periodic reviews within the scope of the oversight of the Financial Benchmarks.

All changes that are decided to be made in the Methodology are made publicly available on Borsa İstanbul corporate website, [Indices - Methodologies and Changes](#) page, accompanied by the relevant explanations and rationale for the revision, before being implemented.

All practices about the Methodology are established and announced by Borsa İstanbul Management with Financial Benchmarks Committee's advice.

2. ABBREVIATIONS, DEFINITIONS AND GENERAL RULES

2.1. Abbreviations

Included in this Methodology;

- Borsa, Borsa İstanbul: Borsa İstanbul A.Ş.,
- LF: Leveraged Factor
- Methodology: BIST Leveraged and Short Indices Methodology,
- Repo Index: BIST-KYD Repo (Net) Index
- The Committee: Financial Benchmarks Committee

expresses.

2.2. Calculation and Dissemination Frequency

BIST Leveraged and Short Indices are calculated for the days both equity and repo/reverse repo markets are open. In calculating the returns of underlying and repo indices for the following business day after one or both of these two markets are closed, index values of the last day, where both markets are open, are taken as "previous day"s values.

Indices are calculated and disseminated at the end of day.

2.3. ~~Data~~ATA PrecisionPRECISION

Leveraged/Short Index Values	Rounded to 4 decimal places
Underlying Index Values	Rounded to 12 decimal places
Repo Index Value	Rounded to 12 decimal places
Leverage Factor	Integer
Data	Data Precision
Leveraged Index Values	Rounded to 4 decimal places
Short Index Values	Rounded to 4 decimal places
Underlying Index Values	Rounded to 12 decimal places
Repo Index Value	Rounded to 12 decimal places
Leverage Factor	Integer

~~2.3.~~ CALCULATED INDICES; STARTING DATES AND VALUES

~~End of day~~eCalculated BIST Leveraged and Short Indices are shown in the table below.

Index	Underlying Index	Leverage Factor (LF)	Base Date	Base Value
BIST 100 Short	BIST 100	-1	01/04/2016	1,000
BIST 100 Short 2X	BIST 100	-2	01/04/2016	1,000
BIST 100 Short 3X	BIST 100	-3	26/05/2025	1,000
BIST 100 Short 4X	BIST 100	-4	26/05/2025	1,000
BIST 100 Leveraged 2X	BIST 100	2	01/04/2016	1,000
BIST 100 Leveraged 3X	BIST 100	3	26/05/2025	1,000

BIST 100 Leveraged 4X	BIST 100	4	26/05/2025	1,000
BIST 30 Short	BIST 30	-1	01/04/2016	1,000
BIST 30 Short 2X	BIST 30	-2	01/04/2016	1,000
BIST 30 Short 3X	BIST 30	-3	26/05/2025	1,000
BIST 30 Short 4X	BIST 30	-4	26/05/2025	1,000
BIST 30 Leveraged 2X	BIST 30	2	01/04/2016	1,000
BIST 30 Leveraged 3X	BIST 30	3	26/05/2025	1,000
BIST 30 Leveraged 4X	BIST 30	4	26/05/2025	1,000

3.4. CALCULATION METHODOLOGY

BIST Leveraged and Short Indices are calculated with the same formula. Leveraged Factor (LF) takes positive values for leveraged indices and negative values for short indices. Index formula is below:

$$Index_t = Index_{t-1} * \left(1 + LF * \left(\frac{Underlying Index_t}{Underlying Index_{t-1}} - 1 \right) - (LF - 1) * \left(\frac{Repo Index_{t-1}}{Repo Index_{t-2}} - 1 \right) \right)$$

$Index_t$: Value of short/leveraged index at time t

LF : Leverage Factor

$Underlying Index_t$: Underlying index on day t.

$Repo Index_t$: BIST – KYD Repo (Net) Index value on day t

Note: Since BIST-KYD Repo (Net) Index value on day t shows the return on day t+1, the return of repo index is calculated using previous days' values.

Equity borrowing costs in short indices and equity lending returns in leveraged indices are ignored.

1. DATA PRECISION

Leveraged/Short Index Values	Rounded to 4 decimal places
Underlying Index Values	Rounded to 12 decimal places
Repo Index Value	Rounded to 12 decimal places
Leverage Factor	Integer

2. MISCELLANEOUS

Equity borrowing costs in short indices and equity lending returns in leveraged indices are ignored.

Leveraged and short indices are calculated for the days both equity and repo/reverse repo markets are open. In calculating the returns of underlying and repo indices for the following business day after one or both of these two markets are closed, index values of the last day, where both markets are open, are taken as “previous day”'s values.

5. CORRECTION IN INDEX VALUES

Retroactive correction in the index values calculated and published at the end of day can be permitted only by the decision of the Borsa İstanbul Management

6. UPDATE FREQUENCY

This Methodology is reviewed at least once a year and updated as needed.

7. EFFECTIVE DATE

This Methodology takes effect on MM/DD/2025. The current version of the Methodology should be confirmed on the Borsa İstanbul corporate website (www.borsaistanbul.com), Indices - Methodologies and Changes page.



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