**APPROVED**

By the Moscow Exchange Executive Board

13 September 2024, Minutes No. 72

**Calculation Methodology for MOEX Real Estate Fund Indices**

**Moscow 2024**

**CONTENTS**

[1. Overview 3](#_Toc179232469)

[1.1. Terms and definitions 3](#_Toc179232470)

[1.2. Overview 3](#_Toc179232471)

[2. Index Calculation 3](#_Toc179232472)

[2.1. Price index calculation 3](#_Toc179232473)

[2.2. Calculating the Total Return Index 4](#_Toc179232474)

[2.3. Determining the Fund Unit Price 5](#_Toc179232475)

[2.4. Determining the Number of Fund Units 5](#_Toc179232476)

[2.5. Calculating Weighting Factors 5](#_Toc179232477)

[2.6. Calculation of the Divisor 6](#_Toc179232478)

[3. Index Construction and Review 6](#_Toc179232479)

[3.1. Index Construction Principles 6](#_Toc179232480)

[3.2. Index Review 6](#_Toc179232481)

[3.3. Treatment of corporate events 7](#_Toc179232482)

[4. Calculation timing and disclosure of the Indices 7](#_Toc179232483)

[4.1. Schedule of index calculation 7](#_Toc179232484)

[4.2. Control over the index calculation 7](#_Toc179232485)

[4.3. Publication 7](#_Toc179232486)

# Overview

* 1. Terms and definitions
     1. The following terms and definitions shall apply in this MOEX IPO Index Calculation Methodology by Public Joint-Stock Company Moscow Exchange MICEX-RTS (the "Methodology"):
        + - Fund Unit means a unit of a closed-end real estate investment fund admitted to trading on the Exchange.
          - Index Constituents means all Fund Units in the Index.
          - The Exchange, Moscow Exchange means Public Joint-Stock Company Moscow Exchange MICEX-RTS
          - Constituent Stocks Parameters Date means a trading day preceding the day of disclosure of information on change of the Constituent Stocks and/or the Constituent Stocks Parameters as of which the Parameters are determined.
          - Index means a benchmark calculated by the Exchange on the basis of trades executed on the Exchange measuring the aggregate price performance in RUB for a selection of Fund Units.
          - Total Return Index means a benchmark which measures the price performance of the Index Constituents together with the income from the reinvestment of income on Fund Units in the Index.
          - Fund Units’s Weight means the Fund Unit’s value as a percentage of the total value of all Fund Units which are Index Constituents.
          - Asset Management Company means the asset management company of a closed-end real estate fund.
     2. Terms not specifically defined herein shall be construed in accordance with other documents of the Exchange as well as the law and regulatory acts of the Bank of Russia.
  2. Overview
     1. In accordance with the Methodology, the Exchange calculates a composite price index of closed-end real estate investment funds called in Russian "Индекс МосБиржи фондов недвижимости". The English name of the index is 'MOEX Closed-End Real Estate Funds Index'. The Index code is MREF.
     2. In addition to the price index, the Exchange calculates the total return index called in Russian "Индекс МосБиржи фондов недвижимости полной доходности". The English name of the index is 'MOEX Closed-End Real Estate Funds Total Return Index'. The Index code is MREFTR.
     3. The word mark "MOEX Index" is a trademark of Moscow Exchange registered by the State Register of Trademarks and Service Marks of the Russian Federation on 18 September 2017 (Trademark Certificate No. 630519). The word mark "MOEX" is a trademark of Moscow Exchange registered by the Federal Service for Intellectual Property in the State Register of Trademarks and Service Marks of the Russian Federation on 29 August 2014 (trademark certificate No. 521450).
     4. This Methodology as amended from time to time is subject to approval by the Exchange and come into effect on the date determined by the Exchange.
     5. It may be amended and supplemented no more frequently than once a quarter. Information on changes introduced, including in the form of a new version of the Methodology, shall be disclosed by the Exchange not later than three business days prior to the effective date.

# 

# Index Calculation

* 1. Price index calculation
     1. The Index is computed by dividing the aggregate value (total capitalization) of all Fund Units as of the calculation moment by the value of divisor by the following formula:

where:

In – value of the Index as of the nth moment;

MCn – total value (capitalization) of all Fund Units as of the nth moment, determined according to clause 2.1.3 of the Methodology;

Dn – value of the Divisor as of the nth moment;

The Divisor is the aggregate value (capitalization) of all Fund Units as of the first day of calculation of the Index, adjusted for the changes in the Index Constituents and the initial value of the Index. On the first day of calculation of the Index, the Divisor is calculated according to the formula:

where:

MC1 – the total value (capitalisation) of all Fund Units on the date the Index was first calculated;

I1 – the initial value of the Index.

Thereafter, the Divisor remains unchanged (Dn=Dn-1), except for the cases described in clause 2.6.

* + 1. The value of the MOEX Closed-End Real Estate Funds Index at the time of its first calculation is: I1 = 1,000 as of 22 December 2023.
    2. The total value of all Units at the nth moment of calculation is determined according to the formula:

where:

N – the total number of Fund Units;

MCi – the capitalisation of the ith Fund Unit.

* + 1. The capitalisation of the ith Fund Unit is calculated as follows:

where:

Pi – the price of the ith Fund Unit in RUB;

Qi – the total number of the ith Fund Units;

Wi – the weighting factor capping the ith Fund Units in the Index (the Weighting Factor).

* + 1. Capitalisation MCi is calculated to four decimal places.
    2. The Indices are expressed in points and rounded to two decimals.
  1. Calculating the Total Return Index
     1. The Total Return Index is calculated using the Index Constituents, values and parameters of the Price Index including income payments on the Fund Units in the Price Index.
     2. Income on Fund Units is included in the calculation of the Total Return Index on the third business day following the beginning of the period in which the income is paid.
     3. If the Exchange learns of the Asset Management Company's decisions regarding the payment of income on Units after the date on which the income is to be treated in accordance with the clause 2.2.2, the income will be included in the calculation on the date on which the Exchange learns of it.
     4. The sources of decisions on the payment of income on Fund Units are the information agencies authorised to disclose information and the Asset Management Companies of closed-end real estate funds.
     5. The Total Return Indices are expressed in points accurate to two decimals.
     6. The date of the first calculation of the MOEX Total Return Closed-End Real Estate Funds Index was 22 December 2023, the value of the Index on the first calculation day was 1,000.
     7. The amount of income on Units taken into account for the calculation of the Total Return Index is determined by the formula below:

where:

TDn – total income on Fund Units in the Index as of the day n;

N – the number of Fund Units in the relevant Index;

Divin – the amount of income on the ith Fund Unit, RUB;

Qin – the total number of the ith Fund Units in the Index on day n;

Win – the weighting factor used to calculate the Index on day n.

* + 1. Income from Fund Units expressed in Total Return Index points:

where:

Dn – the value of the Divisor of the price Index at nth moment.

* + 1. The yield resulting from reinvestment of income is determined according to the formula:

where:

In – the Price Index value on day n;

In-1– the Price Index value on day n-1.

* + 1. The Total Return Index is determined as follows:
  1. Determining the Fund Unit Price
     1. As the price of the ith Fund Unit (Pi) is used the closing price of this Unit determined at the close of trading on the Exchange in accordance with the Trading Rules for the Equity, Deposit and Credit Markets.
     2. The price of the ith Fund Unit (Pi) is determined with the accuracy of the price tick set for this Unit in the Trading Rules for the Equity & Bond, Deposit and Credit Markets.
     3. The procedure for determining the price of the ith Fund Unit (Pi) stipulated in clauses 2.3.1-2.3.2 of this Methodology shall not apply in the case stipulated in clause 3.3.3 of this Methodology.
  2. Determining the Number of Fund Units
     1. For the purposes of this Methodology, the total number of units (Qi) is defined as the total number of ith units issued, unless otherwise determined by the Exchange.
     2. The total number of the ith Fund Units (Qi) is calculated based on the results of the trading day preceding the trading day which is the Constituent Fund Unit Parameters Date except where clause 3.3.3 hereof provides otherwise.
  3. Calculating Weighting Factors
     1. The Weight of the ith Fund Unit is calculated according to the following formula:

where:

Wghti – the weight of the ith Fund Unit;

MCi – the Capitalisation of the ith Fund Unit;

N – the total number of Fund Units.

* + 1. To reduce the impact of Fund Units on the value of the Indices, a weighting factor Wi is used, which is calculated in such a way that the specific weight of a Fund Unit does not exceed the required value depending on the number of Fund Units in the Index. The respective values of the Weight Limits are determined on the Index Review Date as follows:

|  |  |
| --- | --- |
| **The number of Fund Units in the Index** | **Limit, %** |
| 3 to 4 inclusive | 40 |
| 5 to 7 inclusive | 30 |
| 8 to 9 inclusive | 20 |
| 10 and more | 15 |

* + 1. The Weighting Factor Wi of the ith Fund Unit limits the proportion of capitalisation of the ith Fund Unit depending on its Weight. The Weighting Factor Wi can be anything between 0 and 1, with accuracy to seven decimal places according to the rounding rule. Weighting Factors are calculated at the end of the trading day of the Constituent Stock Parameter Date.
  1. Calculation of the Divisor
     1. The Divisor Dn is calculated when the Index Constituents or the Wi factors which limit the capitalisation of the ith Fund Unit (weighting factors) have changed, and/or when corporate events as defined in clause 3.3 hereof have occurred.
     2. Divisor Dn is calculated according to the following formula:

where:

Dn+1 – the new value of Divisor D;

Dn – the current value of Divisor D;

MCn – total value of all Fund Units before the occurrence of the circumstance that is the basis for recalculation of Dividend D in accordance with clause 2.6.1 of this Methodology;

MCn – total value of all Fund Units after the occurrence of the circumstance that is the basis for recalculation of Dividend D in accordance with clause 2.6.1 of this Methodology;

* + 1. Divisor Dn is calculated to four decimal places using the mathematical rounding rule.

# 

# Index Construction and Review

* 1. Index Construction Principles
     1. The list of the Index Constituents includes the names of closed-end real estate investment funds and the names of Asset Management Companies that have launched these closed-end real estate funds.
     2. The Price Index includes Units of closed-end real estate investment funds that meet the following requirements:
        + - the value of the LCi coefficient, determined according to the following formula, is not less than 1.5%:

where

Median(Vi) - the median volume of trades in the ith Fund Unit, calculated for the three months preceding the Constituent Stocks Parameters Date;

WorkDays – the number of trading days per year, 247 by default. It may be decided to set a different value.

Average NAV - the Average Net Asset Value of the ith closed-end investment fund for the three months preceding the Index Review Date.

* + 1. The median trading volume of the Fund Unit, calculated for the three months preceding the Constituent Stocks Parameters Date, is not less than RUB 150,000.
    2. The Exchange may decide to add (remove) a Fund Unit in (from) the Index that is not included (included) in the Index in accordance with the requirements set in clause 3.1.2 of this Methodology. Such decision shall be made subject to the requirements to the content of the Constituent Stocks list established by these Methodology and the regulations of the Bank of Russia.
  1. Index Review
     1. Fund Units are added to and removed from the Index at the Index Reviews.
     2. Regular index reviews shall be carried out once a quarter, except for cases provided by this Methodology. Index revisions take effect from the start of the main trading session on the trading day following the third Thursday in March, June, September and December. The Exchange may decide to set other dates for the entry into force of the reconstituted Index.
     3. An unscheduled review of the Index may take place in the following cases:
        + - when trading in the Fund Unit on the Exchange is ceased;
          - following the introduction of trading restrictions on the Fund Unit in the section/trading board used for the calculation of the Indices in accordance with clause 2.3.1 of this Methodology;
          - when the closed-end investment fund is reorganised;
          - when the closed-end investment fund is closed;
          - in other cases that may have a material impact on the calculation of the Index.
     4. At the time of its review, the Index is structured in accordance with clauses 3.1.1-3.1.4 of this Methodology.
     5. Regular Index Reviews are announced no later than one week before the Exchange's decision to approve new Index Constituents takes effect.
     6. Notice of an extraordinary index review shall be given no later than the day before the new Index Constituents take effect.
  2. Treatment of Corporate Events
     1. In cases of unit splitting, variations in volume, or changes in the process of exercising unit rights, the Exchange shall decide on how to manage these occurrences.
     2. If trading in the ith Fund Unit has been suspended for more than one trading day, the price measured in the Indices shall remain equal to the price calculated on the day of trading suspension.
     3. In the event of a split of the ith units on the date of admission to trading of the units into which units have been converted as a result of their being split, the total number of ith units (Qi) and the price of the ith unit (Pi), calculated based on the results of the trading day preceding the specified date, shall be recalculated. This recalculation involves multiplying the total number of ith units (Qi) by the split ratio and dividing the price of ith units (Pi) by the split ratio.
     4. Upon reorganisation of a closed-end investment fund, the price of the fund units is cut off at the end-of-day price of the trading day preceding the record date. Depending on the results of the reorganisation, the price and/or other parameters of the ith fund unit may be adjusted after the price is no longer cut off. The cut-off date for parameters, as well as the conditions under which they will no longer be cut off, are determined on the basis of judgement (expert opinion).

# 

# Calculation Timing and Disclosure of the Indices

* 1. Schedule of Index Calculation
     1. The Price Index and Total Return Index are calculated once a day at the end of the main trading session. These single index values for the day are simultaneously current values and closing values of corresponding indices until the next calculation of the indices on the next trading day.
     2. Unless otherwise specified by the Bank of Russia regulations, the Exchange is entitled to change the time of calculation of the Price Index and the Total Return Index. Decisions taken by the Exchange in compliance with this clause shall be notified to MOEX trading members not less than five working days prior to the date of coming into effect of respective changes, unless the Exchange has set another term, by announcement of respective information.
  2. Control over the index calculation
     1. The business of creating, calculating and revising the Index, Total Return Index as well as revising this Methodology is based on a set of administrative principles and rules described in the Moscow Exchange Index Management Policy.
     2. In case of technical failure upon calculation of the Index or Total Return Index, or technical failure in the course of securities trading on the Exchange, which resulted in distortion of data used for calculation of indices, recalculation of previously calculated index values is allowed. This recalculation shall be carried out within the shortest possible time from the moment of detection of the technical failure. In case of recalculation of the Index or Total Return Index, the relevant notification is made on the Exchange official website.
     3. In case of circumstances that may adversely affect the adequacy of the Index and/or Total Return Index in reflecting the real condition of the Russian financial market, the Exchange is entitled to take any actions necessary to ensure the adequacy of the indices, including excluding Stocks from the Index, setting values of the parameters used to calculate the indices stipulated by this Methodology, etc.
  3. Publication
     1. Information provided for by the Methodology and regulations of the Bank of Russia is disclosed on the Exchange official website.
     2. In case of changes in factors used in calculation of the indices based on judgment (expert opinion), the Exchange discloses on the official website circumstances taken into account in changing these factors and justification of such changes not later than the day following the day of their change.
     3. The values of the Index and the Total Return Index are published every trading day not later than one hour after the end of the main trading session of the given trading day.
     4. This Methodology and index values for the past year is available to any interested person on the Exchange official website.
     5. Information subject to disclosure in accordance with this Methodology may be additionally disseminated by other means, including through information agencies disseminating MOEX market data.