

RECORD OF CHANGES TO B3 INDEX METHODOLOGIES

Practice regarding stocks (as including shares and units representing shares) after a lifting of exceptional trading status

Pursuant to the terms of External Communication 006/2011-DT dated March 30, 2011, shares of issuers undergoing a debt reorganization process or bankruptcy proceedings or otherwise designated to be under exceptional trading status - which are events that might imply ineligibility to index membership - after a lifting of the exceptional trading status, in verifying qualifications for inclusion in an index, B3 shall take into account the stock's historical data commencing from the date the relevant stock is deemed to have been effectively cleared of the circumstances determining the 'exceptional trading status' designation.

B3 Indices – Portfolio cycle commencement dates

According to the information released in Circular Letter 007/2011-DT dated July 19, 2011, effective from September 2011 B3 introduced changes to the portfolio cycle commencement dates of indices, as set forth in the table below.

Portfolio cycle	Previous commencement date	New commencement date
January through April	1 st business day in January	1 st Monday in January
May through August	1 st business day in May	1 st Monday in May
September through December	1 st business day in September	1 st Monday in September

Where the first Monday of any of the months indicated above is not a regular business day, the portfolio cycle commencement date shall be the first business day thereafter.

Changed practice in determining theoretical ex-price

According to the information released in Circular Letter 041/2014-DP dated June 27, 2014, B3 has adopted a practice change in determining the theoretical ex-price for securities traded on the cash equities market, specifically in the case of declared interest on capital and cash income. Accordingly, the calculation of theoretical ex-price now takes into account the basis provided by the declared amount, net of levies by way of withholding income tax.

As a result, amendments have been made to the following sections of the Concepts and Practices Manual for B3 Indices: total return index and calculation formula for theoretical ex-price.”

Changed of operating procedures related to the disclosure of the theoretical portfolios preview

Pursuant to Circular Letter 037/2018-VOP dated August 2, 2018, the procedures related to the third pre-selection were altered as of the rebalancing of the portfolios in September 2018, and they are now disclosed on the penultimate day of validity of the previous portfolio. The theoretical quantity of the stocks in the new composition are calculated using as reference the closing prices of the assets on the day prior to the disclosure of the third preview.

1 BOVESPA INDEX – IBOVESPA

From the time it was first compiled in January 1968, a number of adjustments have been made to the way we disseminate the Bovespa Index (Ibovespa), none of which implied actual changes in methodology.

However, in light of the substantial development of the Brazilian financial and capital markets, in all their dimensions, particularly over the last 10 years, by mid-2012 BM&FBOVESPA began the process of revising the stock index

methodology. To this end, it established a special Work Group comprised of participants from various industry segments, including, among others, wealth and fund managers, companies, representatives of brokerage firms, and universal banks, etc, to study and debate the new market reality and the index methodology.

In putting forward suggestions to improve the index methodology, the Work Group analyzed all significant occurrences related to the trading of stocks over ten years. As a result, in July 2013, the Work Group presented its suggestions for a revised methodology aimed at ensuring, in light mainly of the modern economic reality, that the Bovespa Index continues to be relevant and the index which reflects more accurately the performance of the Brazilian stock market.

Moreover, in the course of its analysis of the Work Group's recommendations for improvements to the index methodology, BM&FBOVESPA also invited comments from other participants across market segments.

On completing the analysis and revision process, on September 11, 2013, BM&FBOVESPA announced the changes to the Ibovespa methodology, which it would implement based on a two-phased approach.

The principal changes to the index methodology include:

- Weighting function – previously a liquidity-driven weighting, starting from January 2014, weighting is now based on market value attributable to a constituent's free float, with a liquidity cap (Tradability Ratio) set at twice the hypothetical weight of the constituent;;
- The Tradability Ratio (Índice de Negociabilidade, or IN) is now calculated to take into account 1/3 of a component's share of the overall number of trades and 2/3 of the component's share of the overall value traded on the cash equity market;
- The Tradability Ratio cut-off threshold for a stock to qualify for inclusion in the index has been raised from 80% to 85%;

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- The 'active trading' requirement, as measured based on number of trading sessions, has been raised from 80% to 95%;
- In flotations of issuers listed over the course of the two previous portfolio cycles, the new stocks are now accepted for early index membership;
- Stocks that qualify as penny stocks are now ineligible for inclusion in the index;
- Stocks which at any rebalancing classify by individual Tradability Ratio over a certain period, collectively account for over ninety percent (90%) of the sum total of such metric, are now removed from the index;
- The criteria pursuant to which a constituent stock which is suspended from trading retains index membership or is removed from the index have been made clear;
- A limit has been introduced in terms of maximum relative weight of a company's total contribution to the index.

BASE DATE

The initial base value of the Bovespa Index was set at one hundred (100) points as of January 2, 1968.

HISTORY OF CHANGES TO THE WAY THE BOVESPA INDEX (Ibovespa) IS DISCLOSED

The following changes were made to the way the Ibovespa is disseminated without prejudice as to its calculation methodology.

Change Information		Date
1.	Division by 100	October 3, 1983
2.	Division by 10	December 2, 1985

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3.	Division by 10	August 29, 1988
4.	Division by 10	April 14, 1989
5.	Division by 10	January 12, 1990
6.	Division by 10	May 28, 1991
7.	Division by 10	January 21, 1992
8.	Division by 10	January 26, 1993
9.	Division by 10	August 27, 1993
10.	Division by 10	February 10, 1994
11.	Division by 10	March 3, 1997

REVISED METHODOLOGY IMPLEMENTATION DATE

The new methodology took effect from September 11, 2013.

SPECIAL REBALANCING AS OF JANUARY 2014

While the January 2014 rebalancing did apply the revised methodology, the relative weight of each constituent stock has been determined by combining a 50% weighting by the Tradability Ratio, with the other 50% of the weighting based on the new weighting criteria. Starting from the May 2014 rebalancing, the weighting will be calculated in accordance fully with the revised weighting criteria.

2 OTHER B3 INDICES

With a view to achieving standardization, since March 10, 2014, the BM&FBOVESPA indices now adopt the rules and practices set forth in the Concepts and Practices Manual for B3 Indices, which are already established for

the Bovespa Index, pursuant to Circular Letter 063/2013-DP dated September 11, 2013.

The principal changes to the indices methodology include:

- Stocks that qualify as penny stocks are now ineligible for index membership;
- Adoption of an active trading requirement of 95% of the trading sessions held over a certain period (except for the BDRX, IEE, IFIX, IGC, IGC-NM, ISE and ITAG indices, which continue to be subject to other index-specific inclusion criteria);
- The Tradability Ratio is now calculated to take into account 1/3 of a component's share of the overall number of trades and 2/3 of the component's share of the overall value traded on the cash equity market;
- In the case of the IBrX 100, IBrX 50, ICO2 and IVBX 2 indices, if a constituent is removed from the index over the course of a portfolio cycle, no other stock will be selected as a replacement; and
- Adoption of all Special Practices and Index Governance guidelines set forth in the Concepts and Practices Manual for B3 Indices.

2.1 BROAD-BASED INDICES

2.1.1 BRAZIL 100 INDEX (IBrX 100)

BASE DATE

The initial base value of the IBrX 100 index was set at 1,000 points as of December 28, 1995. The index was first released on January 2, 1997.

METHOD ADJUSTMENTS

As with common stocks, starting from the portfolio rebalancing of May 2002, the weighting of preferred stocks began to be made on the basis of the free float.

2.1.2 BRAZIL 50 INDEX (IBrX 50)

BASE DATE

The initial base value of the IBrX 50 index was set at 1,000 points as of December 30, 1997. The index was first released on January 2, 2003.

2.1.3 BM&FBOVESPA BRAZIL BROAD-BASED INDEX (IBrA)

BASE DATE

The initial base value of the IBrA index was set at 1,000 points as of December 29, 2005. The index was first released on May 2, 2011.

2.2 SEGMENT INDICES

2.2.1 BM&FBOVESPA MIDLARGECAP INDEX (MLCX)

BASE DATE

The initial base value of the MLCX index was set at 1,000 points as of April 30, 2008. The index was first released on September 1, 2008. We subsequently compiled a retrospective series commencing on August 31, 2005.

METHOD ADJUSTMENTS

Starting from the May-August 2009 portfolio cycle, the allocation of eligible stocks to either of the MidLargeCap group or SmallCap group began to be made based on calculations performed for the second portfolio preview, with the active trading requirement having been cut down to 95% from 100% of the trading sessions in the period under consideration.

In April 2011, the scope of the metric defined as Tradability Ratio to determine eligibility for index membership increased to 99% from 98% of the sum total of the individual tradability ratios for each eligible stock in the period under consideration.

According to Circular Letter 022/2020-PRE dated March 5, 2020, in order to avoid inconsistency in the classification of an asset, item 4.1 was changed.

2.2.2 BM&FBOVESPA SMALLCAP INDEX (SMLL)

BASE DATE

The initial base value of the SMLL index was set at 1,000 points as of April 30, 2008. The index was first released on September 1, 2008. We subsequently compiled a retrospective series commencing from August 31, 2005.

METHOD ADJUSTMENTS

Starting from the May-August 2009 portfolio cycle, the allocation of eligible stocks to either of the MidLargeCap group or SmallCap group began to be made based on calculations performed for the second portfolio preview, with the active trading requirement having been cut down to 95% from 100% of the trading sessions in the period under consideration.

In April 2011, the scope of the metric defined as Tradability Ratio to determine eligibility for index membership increased to 99% from 98% of the sum total of the individual tradability ratios for each eligible stock in the period under consideration.

According to Circular Letter 022/2020-PRE dated March 5, 2020, a buffer for the exclusion of assets was included from the May 2020 portfolio, in order to reduce the portfolio's turnover.

2.2.3 VALOR BM&FBOVESPA INDEX (IVBX 2)

BASE DATE

The initial base value of the IVBX 2 index was set at 1,000 points as of December 30, 1999. The index was first released on May 2, 2001.

METHOD ADJUSTMENTS

As with common stocks, starting from the portfolio rebalancing of May 2002, the weighting of preferred stocks began to be made on the basis of the free float.

2.2.4 BM&FBOVESPA DIVIDEND INDEX (IDIV)

BASE DATE

The initial base value of the IDIV index was set at 1,000 points as of December 29, 2005. The index was first released on May 2, 2011.

METHOD ADJUSTMENTS

According to Circular Letter 069/2017-DP dated November 1, 2017, the methodology was modified to improve the index selection and weighting criteria, in order to align the IDIV objective with the strategy used by investors.

Among the main features of change are:

- Weighting, which is now carried out by the dividend yield with cap (participation limit) of the representativeness of the free float market value;
- Calculation of the dividend yield used for selection and weighting of assets;
- Inclusion and exclusion parameters of the portfolio; and
- Participation limit per company.

2.3 SECTOR INDICES

According to Circular Letter 072/2016-DP dated July 28, 2016, as of August 8, 2016, the previous sector indices began to consider the new sector classification structure of listed companies.

The indices impacted by the new classification were: Consumer Stock Index (ICON), Real Estate Index (IMOB) and Industrials Index (INDX)

2.3.1 BM&FBOVESPA ELECTRIC UTILITIES INDEX (IEE)

BASE DATE

The initial base value of the IEE index was set at 1,000 points as of December 29, 1994. The index was first released on August 1, 1996.

2.3.2 INDUSTRIALS INDEX (INDX)

BASE DATE

The initial base value of the INDX index was set at 1,000 points as of December 30, 1999. The index was first released on July 3, 2006.

METHOD ADJUSTMENTS

As of August 2016, due to the new sectorial classification structure, the index came to represent industrial sectors comprised of basic materials, industrial goods, cyclical consumption, non-cyclical consumption, information technology and health.

2.3.3 CONSUMER STOCK INDEX (ICON)

BASE DATE

The initial base value of the ICON index was set at 1,000 points as of December 28, 2006. The index was first released on January 2, 2009.

METHOD ADJUSTMENTS

In April 2011, the scope of the metric defined as Tradability Ratio to determine eligibility for index membership increased to 99% from 98% of the sum total of the individual tradability ratios for every eligible stock in the period under consideration.

As of August 2016, due to the new sectorial classification structure, the index began to represent, in addition to the sectors of cyclical and non-cyclical consumption, the health sector.

2.3.4 REAL ESTATE INDEX (IMOB)

BASE DATE

The initial base value of the IMOB index was set at 1,000 points as of December 28, 2007. The index was first released on January 2, 2009.

METHOD ADJUSTMENTS

In April 2011, the scope of the metric defined as Tradability Ratio to determine eligibility for index membership increased to 99% from 98% of the sum total of the individual tradability ratios for every eligible stock in the period under consideration.

As of August 2016, due to the new sectoral classification structure, the civil construction sector was changed to buildings, keeping other sectors of real estate unchanged.

2.3.5 BM&FBOVESPA FINANCIALS INDEX (IFNC)

BASE DATE

The initial base value of the IFNC index was set at 1,000 points as of December 30, 2004. The index was first released on January 4, 2010.

METHOD ADJUSTMENTS

In April 2011, the scope of the metric defined as Tradability Ratio to determine eligibility for index membership) increased to 99% from 98% of the sum total of the individual tradability ratios for every eligible stock in the period under consideration.

2.3.6 BM&FBOVESPA BASIC MATERIALS INDEX (IMAT)

BASE DATE

The initial base value of the IMAT index was set at 1,000 points as of December 29, 2005. The index was first released on May 2, 2011.

2.3.7 BM&FBOVESPA PUBLIC UTILITIES INDEX (UTIL)

BASE DATE

The initial base value of the UTIL index was set at 1,000 points as of December 29, 2005. The index was first released on May 2, 2011.

2.4 SUSTAINABILITY INDICES

2.4.1 CORPORATE SUSTAINABILITY INDEX (ISE)

BASE DATE

The initial base value of the ISE index was set at 1,000 points as of November 30, 2005. The index was first released on December 1, 2005.

METHOD ADJUSTMENTS

Initially, the portfolio cycles extended from early December to late November of the following year. However, starting from January 2, 2011, the portfolio cycle for the ISE index was extended from the first business day of January to the last business day of December of the year.

2.4.2 CARBON EFFICIENT INDEX (ICO2)

BASE DATE

The initial base value of the ICO2 index was set at 1,000 points as of August 31, 2010. The index was first released on December 2, 2010.

METHOD ADJUSTMENTS

According to Circular Letter 089/2020-PRE dated July 09, 2020, the objective of the index has been extended to tracking the entire portfolio of the IBrX 100, previously restricted to IBrX 50, starting from January 4, 2020.

2.5 CORPORATE GOVERNANCE INDICES

2.5.1 SPECIAL CORPORATE GOVERNANCE EQUITY INDEX (IGC)

BASE DATE

The initial base value of the IGC index was set at 1,000 points as of June 25, 2001. The index was first released on June 26, 2001.

2.5.2 CORPORATE GOVERNANCE TRADE INDEX (IGCT)

BASE DATE

The initial base value of the IGCT index was set at 1,000 points as of December 29, 2005. The index was first released on January 3, 2011.

METHOD ADJUSTMENTS

In April 2011, the scope of the metric defined as Tradability Ratio to determine eligibility for index membership increased to 99% from 98% of the sum total of the individual tradability ratios for every eligible stock in the period under consideration.

2.5.3 NOVO MERCADO CORPORATE GOVERNANCE EQUITY INDEX (IGC-NM)

BASE DATE

The initial base value of the IGC-NM index was set at 1,000 points as of December 28, 2006. The index was first released on September 3, 2012.

2.5.4 SPECIAL TAG-ALONG STOCK INDEX (ITAG)

BASE DATE

The initial base value of the ITAG index was set at 1,000 points as of December 30, 2002. The index was first released on June 30, 2005.

2.6 OTHER INDICES

2.6.1 UNSPONSORED BDR INDEX – GLOBAL (BDRX)

BASE DATE

The initial base value of the BDRX index was set at 1,000 points as of October 5, 2010. The index was first released on September 3, 2012.

METHOD ADJUSTMENTS

According to Circular Letter 089/2020-PRE dated July 09, 2020, a new asset inclusion criterion was introduced: an ‘active trading’ requirement settled as 30%. In addition, asset inclusion and exclusion are now effected in accordance with rebalancing of B3’s other indices, starting from September 8, 2020.

According to Circular Letter 023/2021-PRE dated March 25, 2021, the “active trading” requirement was increased to 60%. In addition, the eligible assets were limited to unsponsored BDRs representing Securities (shares or similar and Depositary Receipts).

2.6.2 REAL ESTATE FUND INDEX (IFIX)

BASE DATE

The initial base value of the IFIX index was set at 1,000 points as of December 30, 2010. The index was first released on September 3, 2012.

METHOD ADJUSTMENTS

According to Circular Letter 089/2020-PRE dated July 09, 2020, the ‘active trading’ requirement has been raised from 60% to 95%. Furthermore, the Tradability Ratio (IN) cut-off threshold for an asset to qualify for inclusion in the index has been restricted from 99% to 95%; starting from September 8, 2020.

2.6.3 HIGH LIQUIDITY REAL ESTATE FUND INDEX (IFIX L)

BASE DATE

The initial base value of the IFIX L index was set at 1,000 points as of December 28, 2017. The index was first released on February 22, 2021.

Note: The details related to the composition, calculation and dissemination of all indices are described in each of their methodologies and in the Concepts and Practices Manual for B3 Indices.