IHFA – Methodology

ANBIMA Hedge Funds Index

Version: october/2021

Version history:

Previous version: april-2011

Current version: october-2021

Changes: Only textual and layout changes.

Summary

1 – What is IHFA – ANBIMA Hedge Funds Index ANBIMA

IHFA is a Brazilian hedge funds industry representative index built with the main goal of serving as a parameter for the following-up of this segment´s evolution. Its value reflects, in legal tender, the evolution of a hypothetical financial application on shares of a portfolio of funds, selected by predefined specific criteria, as described below. The index base-date is March 31st 2008 e has index-number equal to 1000. In order to preserve the index representativity, its theoretical portfolio composition is periodically reviewed as per describes procedures.

2 – Dataset

IHFA – ANBIMA Hedge Funds Index is calculated from a dataset provided by CVM (Comissão de Valores Mobiliários), as per covenant signed with the autarchy.

3 – Theoretical portfolio

IHFA theoretical portfolio is quarterly reviewed and has as validity the following periods: january to march, april to june, july to september and october to december.

Here follows the adopted procedures for selecting its components and defining respective theoretical amounts within the index portfolio:

a) Components selection
   The selection criteria for the theoretical portfolio components follows the procedures below, restricted to a the period of 3 previous months to the rebalancing date (average or end-of-period position, accordingly to each criteria):
   1. From all investment funds registered on CVM and ruled by CVM Instruction number 409, only those that belong to a class denominated “multimercado” (multimarket) are selected;
   2. Tenure register, on the referred class at CVM, higher than one year, from the assembly date of each IHFA theoretical portfolio on;
   3. Those funds established as “closed-end funds”, whose shares can only be redeemed after the end of the fund´s validity are excluded;
   4. Exclusive funds are excluded;
   5. Funds that do not charge performance fee are excluded;
   6. Funds with an average number of shares holders lower than 10 during the quarter prior to the rebalancing date are excluded;
   7. Funds that do not disclose updated daily share values are excluded;
   8. Feeder funds that do not hold at least 95% of their net worth invested on one only investment fund are excluded (this criteria is checked by analyzing the last composition of elegible funds portfolio, by assets, available at CVM´s website, at the rebalancing date);

9. In order to avoid “double counting” of Feeder Funds selected by item 8, those which invested master funds are elegible by item 7 are excluded. This criteria is checked by analyzing the last composition of elegible funds portfolio, by assets, available at CVM´s website, at the rebalancing date. Investment Funds that changed their classification to Feeder Funds during the theoretical portfolio last validity month, the analysis is made throughout the Funds Prospect or the Funds Regulation. In order to define its eligibility to fit IHFA theoretical portfolio, the funds prospect has to present, explicitly, the compulsory application of, at least, 95% of the fund´s net worh on shares of the master fund;
10. Multimarket funds classified accordingly to ANBIMA as “balanceados” (balanced), “capital protegido” (protected funds) and “multigestores” (multimanagers) are excluded;
11. Funds that up to this point fulfilled the elegibility criteria are excluded whenever the funds average net worth throughout the quarter prior to the index rebalancing date are inferior to the sample´s median net worth;
12. Funds that up to this point fulfilled the elegibility criteria are excluded whenever the funds yearly volatility on the quarter prior to the index rebalancing date is inferior to the sample´s 1st quartile yearly volatility (using observed daily returns variability).

b) Defining the theoretical amounts of shares from components of the index portfolio
After selecting the funds that will be part of IHFA theoretical portfolio, it is necessary to define the amount of shares that each fund will detain on the index portfolio once its validity period begins.
Firstly, with each fund´s closing net worth on the business day prior to its portfolio rebalancing date, the individual share of each component on the index portfolio is obtained.
Following, the index-number from the business day prior to the index portfolio rebalancing date (the index base value is 1,000 points) is multiplied by each fund observed individual share, defining, therefore, the new number of points each fund detains on the index.
Then each fund number of points on the index is divided by its respective share value of the business day prior to the portoflio rebalancing date, obtaining, therefore, the theoretical amount of quotas each fund will hold throughout the index theoretical portfolio validity.

4 – Index daily calculation

IHFA is entailed by the Laspeyres method (components share prices are weighted by their theoretical amounts, on the base period). Therefore changes on the portfolio composition do not raise impacts on the index results.

In order to obtain IHFA results, shares theoretical amounts (on the base period) of each fund are multiplied by their respective values (on the reference date), incurring, therefore, on each fund´s number of points within the index. The result of the sum of each index component´s number of points corresponds to the index-number.

5 – Sources of information

All used information for theoretical portofolio assembly and index daily calculation arise from capture at the CVM WebService. Accordingly to CVM Instruction number 409, investment funds managers have to send CVM such information.

If, while capturing information from CVM WebService, it is noted the absence of any data from a fund component of the index, data available at the option “Consulta Consolidada dos Fundos” (Funds Consolidated Survey) on CVM website will be used, once such information has been made available to the Autarchy during the period between the archive capture and index calculation.

In order to guarantee the index disclosure timeliness, once given the inability to capture, at CVM, the necessary information for the index calculation, the dataset maintained by ANBIMA will be employed.

6 – Events that can interfere at the index theoretical portfolio – funds removal

Eventhough IHFA theoretical portfolio is valid quarterly, it might suffer changes throughout its validity period. The withdrawal of a component can be due to:

a) A fund´s termination;
b) A change at one of the criteria described at the notional portfolio selection process – items 3 a, 1 to 5 – meaning that a fund is no longer eligible;
c) The non-disclosure of shares daily vaues for 4 days in a row;

At the same date one of events above is observed, necessary exclusions are taken. And, in order to obtain the new theoretical portfolio, adjustments at the theoretical amounts of the index components are made. For that, the share the excluded fund held at the index-number on the date prior to theoretical portfolio revaluation is weighted distributed.

The new portfolio keeps its validity until the end of the original portfolio validity period or until the incidence of a new event that calls for further adjustments.

7 - Events that can interfer at the index daily calculation

The index is not submitted to any kind of recalculation, exceptionally those related to operational errors of human failures.

The absence of daily information regarding shares of funds components of the index theoretical portfolio is tolerated for 3 days, repeating, during this period, the last available share value. After restoring the daily information flow, the index results for those days when repeated quota values where assumed will not be reviewed.

8 – Index dissemination

IHFA is daily disclosured with a 3 business days discrepancy

9 - Disclaimer / Liability Exemption

IHFA´s disclosure has a merely informative purpose and its use by economic agents is optional. ANBIMA does not take responsibility for eventual damages or losses that might arise to users employing this index with any purpose and, in such case, the latter assumes entire and exclusive responsibility.

10 – Appendix

1 – Index number calculation

1.1 – Fund´s daily returns

$$Var\%_i = \left[\left(\frac{Cota_i^{D-0}}{Cota_i^{D-1}}\right) - 1\right] x\ 100$$

Where:

$Var\%_i$ is fund i daily return;

$Cota_i^{D-0}$ is fund i share in $D - 0$;

$Cota_i^{D-1}$ is fund i share in $D - 1$;

1.2 – Fund´s yearly volatility

$$Vol.Anualiz_i = \sqrt{\frac{\sum(Var\%_i - \overline{Var\%_\iota})^2}{(n-1)}}\ x\ \sqrt{252}$$

Where:

$Vol.Anualiz_i$ is fund i yearly volatility;

$Var\%_i$ is fund i daily return;

$\overline{Var\%_\iota}$ is fund i daily returns average;

n is the number of business days during the last 3 months;

1.3 – Fund´s number of points on the index

$$Nº Pontos.Índice_i = \left(\frac{PL_i}{PL_{total}}\right)^{T-1}\ x\ \ NI^{T-1}$$

Where:

$N^{o} Pontos.Índice_i$ is fund i number of points on the index;

PL_i is fund i net worth on the business day prior to the theoretical portfolio rebalancing date;

PL_{total} is the total net worth on the business day prior to the theoretical portfolio rebalancing date;

NI^{T-1} is IHFA index-number on the business day prior to the theoretical portfolio rebalancing date;

1.4 – Fund´s index shares theoretical amount

$$Quant.Teórica_i = \frac{NºPontos.Índice_i}{Cota_i^{T-1}}$$

Where:

$Quant.Teórica_i$ is fund i index shares theoretical amount;

$N^{o}Pontos.Índice_i$ is fund i number of points on the index;

$Cota_i^{T-1}$ is fund i share on the business day prior to the theoretical portfolio rebalancing date;

2 – Formulae for IHFA daily calculation

2.1 – IHFA index number

$$NºÍndiceIHFA^{D-0} = \sum QuantidadeTeórica_i \; x \; Cota_i^{D-0}$$

Where:

$N^{o}ÍndiceIHFA^{D-0}$ is IHFA index number on $D-0$;

$QuantidadeTeórica_i$ is fund i index shares theoretical amount;

$Cota_i^{D-0}$ is fund i share in $D-0$;

2.2 – IHFA daily variation

$$Var\%IHFA^{D-0} = \left[\left(\frac{NºÍndiceIHFA^{D-0}}{NºÍndiceIHFA^{D-1}}\right) - 1\right] x \; 100$$

Where:

$Var\%IHFA^{D-0}$ is IHFA daily variation on $D-0$;

$N^{o}ÍndiceIHFA^{D-0}$ is IHFA index number on $D-0$;

$N^{o}ÍndiceIHFA^{D-1}$ is IHFA index number on $D-1$;

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