## **VettaFi**

# Index Methodology Guidebook

### **EQM High Income Pass-Through Securities Index**

29 of March 2023 Version #1.1



# **Table of Contents**

TABLE OF CONTENTS	2
LOG OF AMENDMENTS	3
INTRODUCTION AND BACKGROUND	4
ABOUT THE INDEX ABOUT THIS DOCUMENT	4
INDEX CHARACTERISTICS AND SPECIFICATIONS	5
<ol> <li>GENERAL INFORMATION AND INDEX OBJECTIVES</li> <li>SHORT NAME AND IDENTIFIERS</li> <li>INDEX CALCULATION AND DISSEMINATION FREQUENCY</li> </ol>	5 5 5
INDEX METHODOLOGY	7
<ol> <li>UNIVERSE CONSTRUCTION</li> <li>INDEX CONSTITUENT SELECTION</li> <li>INDEX WEIGHTING</li> <li>INDEX REVIEW SCHEDULE</li> </ol>	7 8 8 8
INDEX CALCULATION	g
<ol> <li>INDEX FORMULA</li> <li>COMPUTATIONAL ACCURACY</li> <li>INDEX DIVISOR ADJUSTMENTS</li> <li>DIVIDENDS AND OTHER DISTRIBUTIONS</li> <li>CORPORATE ACTIONS AND OTHER ADJUSTMENTS</li> <li>CORRECTION AND RECALCULATION</li> <li>MARKET DISRUPTION</li> </ol>	9 9 9 10 10 11 11
INDEX GOVERNANCE AND MISCELLANEOUS	12
1. METHODOLOGY ADJUSTMENTS AND REVIEWS 2. INDEX GOVERNANCE BODIES 3. TERMINOLOGY 4. EQM INDEXES DISCLAIMER 5. BITA DISCLAIMER	12 12 13 16 16

# Log of Amendments

- 1. **02.28.2023**
- 2. **03.27.2023**
- 3. **03.28.2023**
- 4. **03.29.2023**
- v.1.0. First publication of methodology guide.
- Rebalance effective last business day of quarter.
- -clarification of inception dates
- -clarification of fixed weight proforma rebalancing treatment

## Introduction and Background

#### ABOUT THE INDEX

The **EQM High Income Pass-Through Securities Index** is a Gross Total Return (TR) and Price Return (PR) index comprised of U.S. exchange-listed high income pass-through securities in the following asset categories: Closed-End Funds (CEFs), Business Development Companies (BDCs), Real Estate Investment Trusts (REITs), and Energy Master Limited Partnerships (MLPs).

#### ABOUT THIS DOCUMENT

This document is published to serve as a guidebook of the methodologies adopted in the construction, calculation, and management of the index.

Any methodological changes or alterations to this document are performed by the Committee specified on section 2 of the Index Governance and Miscellaneous section. The index is owned and administered by EQM Indexes and calculated by BITA GmbH on its limited role as calculation agent.

There is no obligation for BITA to advise third parties and/or financial intermediaries, of any errors or omissions in the Index. The publication of the Index by BITA does not constitute a recommendation for capital investment and does not contain any assurance or opinion of BITA regarding a possible investment in a financial instrument based on this Index.

### **Index Characteristics and Specifications**

#### 1. GENERAL INFORMATION AND INDEX OBJECTIVES

The **EQM High Income Pass-Through Securities Index** is an index designed to generate income from exposure to high income pass-through securities that must return at least 90% of their taxable earnings to shareholders including: Closed End Funds (CEFs), Business Development Companies (BDCs), Real Estate Investment Trusts (REITs), and Energy Master Limited Partnerships (MLPs).

Live Inception Date: 03/06/2023

Index History Inception Date: 12/31/2017

• Index value at inception: 100

Return Calculation: Gross Total Return (TR) and Price Return (PR)

Weighting Mechanism: Equal weighting

Rebalancing Frequency: Quarterly

Reconstitution: AnnuallyNumber of Constituents: 40

The base currency of the index is USD. Index values may also be published in other currencies when applicable.

#### 2. SHORT NAME AND IDENTIFIERS

The index is distributed under the following identifiers

Name	Asset Class	FIGI	Ticker
EQM High Income Pass-Through Securities Index	Multi-Asset Alternative		HIPSTR
	Income		HIPSPR

#### 3. INDEX CALCULATION AND DISSEMINATION FREQUENCY

#### 3.1. Calculation Methodology

The index is based on the Laspeyres formula, which links each successive weighted basket of securities in the index with the preceding basket. This translates into a unique index "Divisor" for each index, which is adjusted to maintain the continuity of the index's values across changes due to corporate actions.

#### 3.2. Calculation Frequency

The official index closing level is calculated once a day, every Business Day (EoD calculation). In addition to the official close calculation, index levels are calculated intraday with a 1-second resolution during the index dissemination period. Historical "EoD" index data is available as backtested data starting on the index backtesting date, and as calculated and maintained data starting on the index inception date.

At each calculation point, the index value is calculated based on the constituents' individual quotes on the respective regulated exchanges. The constituents' most recent prices are used. When the constituents are quoted in a different currency, quotes are translated using the most recent spot FX rates. The daily index closing value is calculated using the spot FX rates as of the 16.00 hrs London (UTC + 01:00) WM fixing quoted by Reuters. If no 16:00 London WM Fixing is available, an alternative 16:00 London spot rate will be used.

#### 3.3. Index Dissemination

The Intraday Calculation and Dissemination of the Index occurs every Business Day between 9:30 ET and 16:00 ET. Official index EOD levels are calculated and disseminated after the close of all exchanges on which the index constituents are listed (EoD calculation). A day is a Business Day if at least one of the exchanges considered in the Index is open for trading.

The index is distributed via BITA's direct dissemination channels and a variety of data vendors when applicable.





## Index Methodology

#### 1. UNIVERSE CONSTRUCTION

#### 1.1 Initial Universe

- The initial Universe is composed of U.S.-listed securities trading on a major U.S. exchange in the following asset categories: Closed-End Funds (CEFs); Business Development Companies (BDCs); Real Estate Investment Trusts (REITs); and Energy Master Limited Partnerships (MLPs); as identified by the index provider. REITS used to fund private prisons are excluded from the REITs investable universe.

#### 4.2. Eligible Universe

The final eligible universe is reconstituted annually applying following screens and filters for each asset category:

- Closed End Funds (CEFs) A closed-end fund is a fund that issues a fixed number of shares through a single initial public offering to raise capital for its initial investments. CEFs are closed to new investment, but trade on public exchanges.
  - Assets of at least \$150 million USD
  - o Average daily traded value (ADTV) of at least \$500k over the last 6 months
  - Top 10 CEFs with the highest indicated dividend yield and lowest 180-day volatility
- Business Development Companies (BDCs) A type of closed-end fund that makes investments in developing and financially distressed firms.
  - USD market capitalization of at least \$500 million
  - o Average daily traded value (ADTV) of at least \$500k over the last 6 months
  - Top 10 BDCs with the highest indicated dividend yield and lowest 180-day volatility
- Real Estate Investment Trusts (REITs) An investment vehicle that owns, operates, or finances income-generating real estate assets.
  - USD market capitalization of at least \$1 billion
  - o Average daily traded value (ADTV) of at least \$500k over the last 6 months
  - Top 10 REITS with the highest indicated dividend yield and lowest 180-day volatility
- Energy Master Limited Partnerships (MLPs) Master Limited Partnerships trading energy infrastructure assets that operate primarily in the oil and gas midstream industry. MLPs typically consist of a general partner (GP) and limited partners (LPs).
  - USD market capitalization of at least \$1 billion
  - Average daily traded value (ADTV) of at least \$500k over the last 6 months
  - Top 10 MLPs with the highest indicated dividend yield and lowest 180-day volatility



#### 2. INDEX CONSTITUENT SELECTION

#### 2.1. Index Ranking

The top 40 securities meeting eligible universe requirements are selected annually for the index reconstitution.

#### **2.2 Security Considerations**

If a company has more than one share class that qualifies for membership on a stand-alone basis in the index, then the most liquid share version will be utilized.

#### 3. INDEX WEIGHTING

On the Determination Day, index constituents will be equally weighted.

#### 4. INDEX REVIEW SCHEDULE

#### **5.1. Ordinary Adjustments**

The Index is be reconstituted annually at year end, and rebalanced each quarter end in March, June, September, at the Close of Business (COB) on the last trading day of the rebalancing month after market close, effective the next trading day of the month.

The Determination Date for ordinary adjustments occurs at the COB, five trading days prior to the rebalancing / reconstitution date.

BITA provides constituent pro-forma files each time the Index rebalances. Pro-forma files are normally released daily, covering the period between the Determination and Effective dates (proforma period). Proforma weights will be fixed on the determination date and will remain fixed until the effective rebalancing.

#### **5.2. Extraordinary Adjustments**

Between reconstitutions, deletions can occur due to corporate actions such as acquisitions, mergers, and spin-offs, or due to insolvency or dividend suspensions. Under those circumstances, components will be deleted from the index and the proceeds distributed equally among the remaining index components in that asset category until a replacement component is selected at the next quarterly rebalance.





.8.

### Index Calculation

#### 1. INDEX FORMULA

The index value is calculated every 1 second with the updated price from its constituents using the following formula:

$$Index Value_t = \sum_{i} \frac{P_{i,t} * IWF_{i,t} * TOS_{i,t} * AWF_{i,t} * F_{i,t}}{D_t}$$

Where:

P<sub>i,t</sub> = Price of the constituent 'i' at time t

IWF it = Investable Weighting Factor of constituent "i" at time "t"

TOS it = Total no. of Shares Outstanding of constituent "i" at time "t"

AWF i,t= Adjustable Weighting Factor for constituent "i" at time "t"

Fit = Foreign exchange Rate for constituent "i" at time "t"

Dt= Divisor Value at time "t"

The initial divisor (at inception  $t = t_0$ ) value is calculated according to the following formula:

$$D_{t0} = \frac{\sum_{i} (P_{i,t0} * IWF_{i,t0} * TOS_{i,t0} * AWF_{i,t} * F_{i,t0})}{Initial\ Index\ Value}$$

On each Adjustment Day t, the divisor is adjusted to keep the index value constant. The new divisor is calculated as:

$$D_{t+1} = D_t + \frac{Change\ in\ Market\ Cap\ of\ the\ Index}{Index\ Value_t}$$

The new divisor is then used in the calculation of the following day's index open.

#### 2. COMPUTATIONAL ACCURACY

The index will be calculated to 13 decimal figures.

Index values will be rounded to 2 decimal places for dissemination.

#### 3. INDEX DIVISOR ADJUSTMENTS

The market capitalization of the index is affected by numerous events other than daily security price changes. At the company level, market capitalizations are affected by share changes caused by corporate actions such as takeovers, acquisitions, and spin-offs. Changes also result from company additions and deletions to the index.



In order to insulate the members of the index from the effects of index constituent changes and corporate actions, the index's market capitalization is divided by an adjustment factor called the index divisor. During the trading day, the index is computed by dividing the index's current market capitalization by the divisor value. If there are no corporate actions or constituent changes, the divisor remains unchanged for the next trading day. If there is an event resulting in a capitalization change, the index's new adjusted base market cap is calculated after the close using the adjusted prices and adjusted share figures. Then, a new divisor is calculated for use at the opening on the next trading day. The new divisor links the closing index value to the new adjusted base market capitalization of the index.

#### 4. DIVIDENDS AND OTHER DISTRIBUTIONS

For the purposes of the index adjustment, BITA distinguishes between Cash dividends and Special dividends. Cash dividends are treated differently depending on the type of Index.

In a Price Return Index, regular Cash dividends are neglected and only the Special dividends are considered.

In a Gross Total Return Index, reinvestments of Cash and Special dividend distributions are considered without performing deductions due to withholding taxes.

In a Net Total Return Index, reinvestments of Cash and Special dividend distributions are considered after deducting the withholding tax.

Dividend payments and other distributions will lead to a change in the value of the divisor. The new Divisor is calculated as follows:

$$D_{t+1} = \frac{Index\; Market\; Cap\; Open_{t+1}}{Index\; Value\; at\; Close_t}$$

For detailed information on dividends treatment, please refer to the "BITA's Corporate Action Treatment Guide".

#### 5. CORPORATE ACTIONS AND OTHER ADJUSTMENTS

All corporate actions and events will be monitored and processed as per the rules and methodologies explicit in "BITA's Corporate Action Treatment Guide".

Shares outstanding for constituents change regularly due to a variety of events and corporate actions. Share changes of less than 10% are implemented at the Ordinary Index Reviews.

If the number of outstanding shares for an index constituent change by more than 10% due to a corporate action, such as those listed in BITA's Corporate Actions Treatment Guide, the company's share outstanding will be updated after the close of trading on the day prior to the ex-date of the corporate action.



**VettaFi** 

In case of constituents from different countries and/or regions, it is possible that a business day in one country would be a public holiday in the other. In all such cases, the business day is considered valid and the index is calculated and disseminated just like in the normal index days. For the constituents that have a public holiday (i.e. no price movement) on index business day, the real-time forex rate is the only factor contributing to changes in the value of such constituents. In case that the public holiday is in the base currency of the index, then the constituent's prices are kept constant throughout the day.

#### 6. CORRECTION AND RECALCULATION

As per BITA's Index Correction and Recalculation Policy, processes are in place to reduce error likelihood, ensure timeliness of identification, avoid subjectivity of corrective decisions and mitigate impact to clients.

While every effort is taken to ensure the accuracy of the index inputs, information and calculation, there is no guarantee that the index will be error-proof. Errors may occur due to data input errors, technology errors, application errors or other reasons.

For detailed information on specific errors, implementation timing and correction processes, please refer to the "BITA Correction and Recalculation Policy".

#### 7. MARKET DISRUPTION

In periods of market stress, that might result in inaccurate market prices, delayed data inputs, illiquid constituents or fragmented markets, BITA calculates the Index following predetermined procedures as set out in its "BITA Index Termination and Business Continuity Policy", available at BITA's website.





· 11 ·

### Index Governance and Miscellaneous

#### 1. METHODOLOGY ADJUSTMENTS AND REVIEWS

The Index Methodology is reviewed on a quarterly by EQM Indexes Index Committee, to make sure the Index continues to reflect the economic realities of the market and is not based on obsolete inputs or assumptions.

In case an adjustment to the Methodology is required, a detailed written policy outlines the steps and approvals required to develop, document and approve the Index and its Methodology.

#### 2. INDEX GOVERNANCE BODIES

#### 2.1. EQM High Income Pass-Through Securities Index Committee

The Index Committee is comprised of investment professionals and/or industry experts and must abide by EQM Indexes Trading Policy.

#### 3. TERMINOLOGY

**Adjustable Weighting Factor (AWF)** is the adjustment factor introduced in the index calculation formula so that the index constituent weight capping factor is satisfied. No AWF changes occur due to corporate actions between rebalancing.

The AWF for each constituent on the determination date is calculated as:

$$AWF = \frac{CW}{W}$$

Where CW is the Capped Weight of that index constituent calculated on the determination date, and W is the uncapped weight (based on the free-float market capitalization) of that index constituent calculated on the determination date.

**Adjustment Day** is the day in which adjustments to the index divisor are performed. This could be days where reconstitution and rebalancing happen, or alternatively days before the ex-date of a corporate action.

**Average Daily Traded Value** of a stock is the sum of the Daily Traded Value over a specified period divided by the number of trading days over that specified period.

**Business Day** is a day on which an exchange is open for the buying and selling of securities, generally occurring on weekdays between normal business hours.

**Capping Factor** is the factor that limits the weight of any index constituent to a maximum pre-defined limit.

**Coordinated Universal Time (UTC)** is the primary time standard by which the world regulates clocks and time.

**Daily Traded Value** of a stock is the product of the closing price of that stock and the number of shares traded on the exchange on that business day.

**Determination Date** is the date (at end of day) used as a reference for the determination of index constituents, as well as index shares and parameters, which are to be applied at rebalancing/reconstitution.

**End of Day (EoD) Index Values** are the official index close levels calculated and stored, using official exchange close prices, at the end of each business day.

**ET time:** Eastern Time is five hours behind the Coordinated Universal Time standard, written as an offset of UTC - 5:00. That means to find the standard time in the zone one must subtract five hours from Coordinated Universal Time. During the daylight-saving adjustment period (March-October), the difference is four hours.

**CET time:** Central European Time is one hour ahead of the Coordinated Universal Time standard, written as an offset of UTC + 1:00. That means to find the standard time in the zone one must add one



**VettaFi** 

hour to Coordinated Universal Time. During the daylight-saving adjustment period (March-October), the difference is two hours.

**Extraordinary events** are extreme market events that make index adjustments necessary. These events include:

- Merger
- Takeover bid
- Delisting
- Insolvency

For an exhaustive list, please refer to <u>BITA Equity Corporate Actions Treatment Guide</u>.

**Gross Total Return Index** is obtained by reinvesting in the ordinary gross dividends declared by the index constituents, and assumes that any cash distributions, such as dividends, are reinvested assuming zero tax rate applicability on such cash distributions.

**Net Total Return Indexes** is obtained by reinvesting in the index the ordinary net dividends (i.e less withholding taxes) declared by the index constituents, and assumes that any cash distributions, such as dividends, are reinvested with the corresponding tax rate applied on such cash distributions.

**Price Return Indexes** is obtained by tracking the plain prices of the index constituent instruments, unadjusted with the respect to any possible dividends or other cash payouts from the instruments.

**Inception Date** refers to the official start date of the index, with the index base value as close value.

**Investable Weighting Factor (IWF)** is the percentage of shares outstanding that are included in the index calculation. In the case of Float-Adjusted Market Cap Weighted Indexes, the total shares outstanding are adjusted so that they exclude from the index calculation all shares not freely available to investors.

BITA uses fundamental data from a variety of recognized data vendors to calculate the IWF for each of its index constituents.

The **IWF** is calculated as:

$$IWF = \frac{TOS - SCH}{TOS}$$

Where **TOS** is the total number of shares outstanding, **SCH** is the number of shares restricted to investors.

Free float factors are reviewed on a regular basis in line with the rebalancing/reconstitution schedule using the most recent available data.

Changes to the number of shares due to stock dividends, splits, rights issues etc. are implemented immediately and effective the next trading day.

In case of other corporate actions and events, if there is a change of more than 10% in the SOC, BITA will announce the update in SOC immediately and the adjustment comes into effect two trading days after the announcement. All other applicable changes are announced on the next underlying data



**VettaFi** 

announcement date, implemented on the index review date and effective the next trading day after implementation.

**Market Capitalization** is calculated as the product of the number of shares outstanding of the share class and the share price.

The index **Divisor** is an arbitrary number that is first defined when an index is first published. Its initial use is to divide the total value of the index to produce an index value that is easy to handle. Subsequently, the index divisor remains constant and requires adjustments, either when rebalancing and reconstituting or through corporate action treatments.

**Pro-forma Files** distributed to Index subscribers during the Pro-forma Period (i.e. the period between the determination date and the effective date of the upcoming rebalancing/reconstitution) contain the preliminary index weights, index shares and other relevant parameters for the upcoming rebalancing/reconstitution. While the index shares remain constant (unless affected by corporate actions) during the Pro-forma Period, the index weights will move along with the market.

**Total Number of Shares Outstanding (TOS)** of an index constituent on any given business day refers to a company's stock currently held by all its shareholders, including share blocks held by institutional investors and restricted shares owned by the company's officers and insiders.

· 15 ·

#### 4. EQM INDEXES DISCLAIMER

It is not possible to invest directly in an index. Exposure to an asset class represented by an index is available through investable instruments based on that index. EQM Indexes does not sponsor, endorse, sell, promote or manage any investment fund or other investment vehicle that is offered by third parties and that seeks to provide an investment return based on the performance of any index. EQM Indexes makes no assurance that investment products based on the Index will accurately track index performance or provide positive investment returns. EQM Indexes is not an investment advisor and makes no representation regarding the advisability of investing in any such investment fund or other investment vehicle. A decision to invest in any such investment fund or other investment vehicle should not be made in reliance on any of the statements set forth in this article. Prospective investors are advised to make an investment in any such fund or other vehicle only after carefully considering the risks associated with investing in such funds, as detailed in an offering memorandum or similar document that is prepared by or on behalf of the issuer of the investment fund or other vehicle. Inclusion of a security, nor is it considered to be investment advice.

#### **5. BITA DISCLAIMER**

All information is provided for information purposes only. All information and data contained in this publication, and provided by BITA, are obtained by BITA from sources believed by it to be accurate and reliable. Because of the possibility of human and mechanical error as well as other factors such information and data are provided "as is" without warranty of any kind.

The Index is merely calculated and published by BITA. BITA does not offer any explicit or tacit guarantee or assurance, neither pertaining to the results from the use of the Index nor the level of the Index at any certain point in time.

The publication of the Index by BITA does not constitute a recommendation for capital investment and does not contain any assurance or opinion of BITA regarding a possible investment in a financial instrument based on this Index.

.16.

