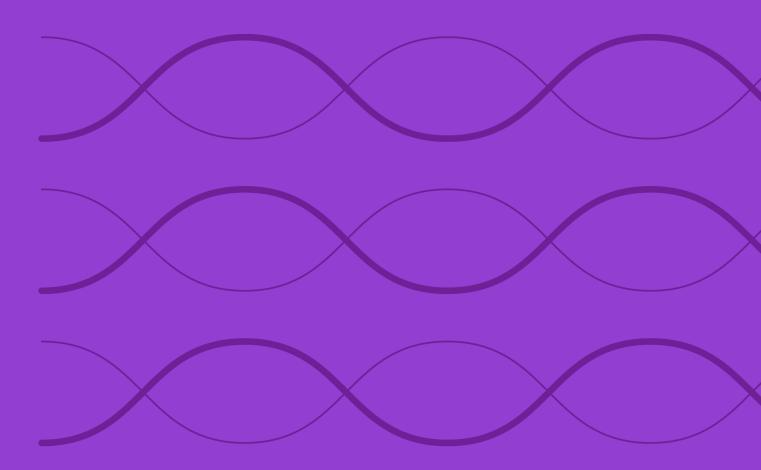


Construction Rules for the Morningstar® PitchBook Listed Private Equity Focus Static 15 2022 Index™



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Overview

The Morningstar® PitchBook Listed Private Equity Focus Static 15 2022 IndexSM tracks the performance of 15 public companies with significant private equity exposure as of March 2022. The index constituents do not change, outside of changes derived from corporate actions.

This index does not incorporate environmental, social, or governance criteria.

Index Inception and Performance Start Date

The index inception date is May 16, 2022, and the performance start date, when the first back-tested index value was calculated, is December 16, 2011. Back-tested performance is generated using the same securities found in Appendix 5. If a security did not exist at the time, the weights are proportionally redistributed to the other securities.



Index Construction



The primary industry and security classification are based on PitchBook data.

Starting Universe

Constituents of the Morningstar® PitchBook Listed Private Equity Focus Static 15 2022 Index are derived from the Morningstar® PitchBook Listed Private Equity Focus Index. For more detail on benchmark construction, refer to the construction rules for the Morningstar® PitchBook Listed Private Equity Focus Index.

Securities were selected in March 2022 based on the criteria below. Constituents do not change over time. If a security were to cease to exist, no constituent would replace it, and the index will continue to use equal weighting.

Eligibility

• To qualify for inclusion, securities must be constituents from the parent Index, Morningstar® PitchBook Listed Private Equity Focus Index, as of March 2022.

Portfolio Construction

- Select the most 15 liquid eligible stocks by average daily traded value (calculated in EUR).
- The list of constituents does not change.

For more detail on the selection process, please refer to Appendix 3.



Number of Stocks

The number of stocks is fixed to 15 at the time of launch. For back-testing purposes, the 15 stocks found in Appendix 5 were held constant during the back-testing period. If a stock did not have data available or was not incepted at that time in history, the weight on the constituent was rescaled proportionally to the other index constituents. No additional index constituents will be added on a go-forward basis. If one of the 15 fixed constituents were to delist, the index would be reweighted and the constituent would not be replaced.

Index Weighting

The index is equal weighted. For more details, refer to the Morningstar Indexes Calculation Methodology rulebook.



Index Maintenance and Calculation

Reconstitution and Rebalancing

The index is rebalanced quarterly on the third Friday of March, June, September, and December. Adjustments are implemented after Friday's market close and reflected the following Monday. If Monday is an index holiday, the rebalance is reflected the next business day. The market data used for determining the private equity exposure of a security is as of the last trading day of October. There is no reconstitution for this index since the list of constituents is static.

Index files are published according to the global calendar schedule. For more information, please refer to the Morningstar Indexes Holiday Calendar.

Refer to Appendix 2 for details on rebalancing.

Corporate Actions

The treatment of corporate actions will be as per the alternatively-weighted indexes corporate action methodology. In case of spin-off, the spun-off entity is not added to the index, and its weight is distributed proportionately across the rest of the index constituents. For more details, please refer to the Morningstar Indexes Corporate Actions Methodology rulebook.

Index Calculation and Price Data

Details about index calculations and price data can be found in their respective rulebooks: <u>Morningstar Indexes</u> <u>Calculation Methodology</u> and <u>Equity Closing Prices Used for Index Calculation</u>.



Methodology Review and Index Cessation Policy

The index methodology is continually reviewed to ensure it achieves all stated objectives. These reviews consider corporate action treatment, eligibility requirements, and maintenance procedures. Subscribers to the index will be notified before any methodology changes are made. For more details, refer to the Morningstar Index Methodology Change Policy.

Morningstar Indexes notifies all subscribers and stakeholders of the index that circumstances might arise that require a material change to, or a possible cessation of, the index. These circumstances are generally not within Morningstar's control and may include significant changes to the underlying market structure, inadequate access to necessary data, geo-political events, and regulatory changes. In addition, factors such as low usage or methodology convergence may result in the cessation of an index.

Because the cessation of the index or benchmark index could disrupt subscriber products that reference this index, all subscribers are encouraged to have robust fallback procedures if an index is terminated. For more details, refer to the Morningstar Index Cessation Process.



Data Correction and Precision

Intraday Index Data Corrections

Commercially reasonable efforts are made to ensure the accuracy of data used in real-time index calculations. If incorrect price or corporate action data affects index calculations, corrections are applied prospectively

Index-Related Data and Divisor Corrections

Incorrect pricing and corporate action data for individual issues in the database will generally be corrected upon detection. In addition, an incorrect divisor of an index, if discovered within two days of its occurrence, will be fixed retroactively on the day it is discovered to prevent an error from being carried forward. Commercially reasonable efforts are made to correct an older error subject to its significance and feasibility.

For more details, refer to the Recalculation Guidelines.

Computational and Reporting Precision

For reporting purposes, index values are rounded to two decimal places and divisors are rounded to appropriate decimal places.

Exceptions

While Morningstar will seek to apply the method described above, the market environment, supervisory, legal, financial, or tax reasons may require an alternative approach to be adopted. A decision to take an alternative approach will be made by the relevant Morningstar Indexes Methodology Committee, and in all instances, the application of a nonstandard process will be reported to the Morningstar Indexes Oversight Committee.



Appendixes

Rebalance

Appendix 1: Modifications to the Rulebook

Section	Description of Change	Update Date	
Entire Rulebook Move to new template.		March 2023	
Corporate Action	Updated link to Morningstar Standard Methodology	July 2024	
Appendix 2: Glossary			
Term	Description		

Appendix 3: Selection Process

The following definitions are used as a guideline to classify companies as PE/buyout, growth, mezzanine, and venture capital in the selection process:

• PE/buyout: An investor that specializes in purchasing mainly a controlling interest of an established company (in a leveraged buyout).

During each rebalancing, the weights are reset to their target.

- Growth/expansion: A sector of PE focusing on investing in minority stakes in already-established businesses to fund growth.
- Mezzanine: An investor that provides both equity and debt. Investments typically come in the form of subordinated debt and minority equity.
- Venture capital: Financing source for new businesses or turnaround ventures that usually combine risk with the potential for high return.

Investors, limited partners, and service providers are considered to have substantial PE investments if their PE investments are greater than 50% of their assets. A buffer of 10% is given to existing constituents—that is, for existing constituents, PE investments should be greater than 40% of the assets. Commercial and investment banks are excluded from the selection process. Private equity investments include investments done by the firm in private companies through buyout/LBO, PE growth, mezzanine, and venture capital deals. While calculating private equity investments, investments in buildings and property are ignored. Overall investment is based on the financial investments done by the firm in the investee companies.

Appendix 4: Inception Date

Index	Performance Inception Date	Inception Date
Morningstar® PitchBook Developed Markets Listed Private Equity Static 2022 Index	Dec. 16, 2011	May 16, 2022



Appendix 5: Security List

Individual Securities

Constituent Name	Initial Index Weight (%)
Blackstone Inc.	6.67
T Rowe Price Group Inc	6.67
KKR & Co Inc	6.67
Apollo Global Management Inc.	6.67
Carlyle Group Inc.	6.67
Partners Group Hldg	6.67
Ares Management Corp	6.67
EQT AB	6.67
SBI Holdings Inc	6.67
EXOR NV	6.67
3I Group	6.67
Kinnevik Investment AB B	6.67
StepStone Group Inc.	6.67
Hamilton Lane Inc	6.67
Intermediate Capital Group	6.67

Appendix 6: Decrement Indexes

Index Name	Underlying Index	Base Value	Base Date	Performance inception Date	Inception Date
Morningstar® PitchBook Listed Private Equity Static 15 2022 Index Decrement 5%	Morningstar® PitchBook Listed Private Equity Static 15 2022 Index NR EUR	1000	Nov. 15, 2021	Dec. 16, 2011	May 20, 2022
Morningstar® PitchBook Listed Private Equity Static 15 2022 Index Decrement 4%	Morningstar® PitchBook Listed Private Equity Static 15 2022 Index NR EUR	1000	Nov. 15, 2021	Dec. 16, 2011	May 20, 2022
Morningstar® PitchBook Listed Private Equity Static 15 2022 Index Decrement 50 Point	Morningstar® PitchBook Listed Private Equity Static 15 2022 Index GR EUR	1000	Nov. 15, 2021	Dec. 16, 2011	May 20, 2022



Morningstar® PitchBook Listed Private Equity Static 15 2022 Index Decrement 40 Point	Morningstar® PitchBook Listed Private Equity Static 15 2022 Index GR EUR	1000	Nov. 15, 2021	Dec. 16, 2011	May 20, 2022
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Appendix 7: Decrement Levels

The Index Levels are adjusted by deducting a pre-determined value of index points or fixed percentage point from the Net Return (NR) levels of the base index based on the index version. These constant markdowns are applied to the underlying Index daily.

Return Variant of the Base Index	Base Currency	Decrement Type	Decremen t Frequenc y	Decrement Application	Decrement Value	Day Count Conventio n
Net Total Return Gross Total Return	EUR	Fixed Percentage Decrement or Fixed Point Decrement based on the index version.	Daily	Geometric applicatio n for both decremen t types.	5% decrement based on the Net Total Return; 50- point decrement based on Gross Total Return	*ACT/36 5

^{*}ACT is the number of calendar days between two calculation days.

Formula for Fixed Point Decrement Geometric Decrement Calculation

$$IV_t = (IV_{t-1} \times (U_t \div U_{t-1})) - (D \times (Act(t-1,t) \div DayCount))$$

M/hara

IV_t = The value of the Fixed Point Decrement Index for calculation day t

IV_{t-1} = The value of the Fixed Point Decrement Index for day t-1

Ut = The value of the base Index for calculation day t

U_{t-1} = The value of the base Index for calculation day t-1

Act(t-1, t) = Number of calendar days between calculation day t-1 and calculation day t

D = The Decrement value expressed in Index points

DayCount = Set to 365

Formula for Fixed Percentage Decrement

Geometric Decrement Calculation

$$IV_t = IV_{t-1} \times ((U_t \div U_{t-1}) - (c \times (Act(t-1,t) \div DayCount)))$$

Where:

IV_t = The value of the Fixed Percentage Decrement Index for calculation day t

IV_{t-1} = The value of the Fixed Percentage Decrement Index for day t-1



 U_t = The value of the base Index for calculation day t U_{t-1} = The value of the base Index for calculation day t-1 Act(t-1, t) = N umber of calendar days between calculation day t-1 and calculation day t c = The Decrement value expressed in Fixed Percentage DayCount = Set to 365



^{*} The missing data prior to the backfill date have been backfilled based on the earliest data available. # Missing data treatment is applied after the data backfill process is completed.

About Morningstar Indexes

Morningstar Indexes was built to keep up with the evolving needs of investors—and to be a leading-edge advocate for them. Our rich heritage as a transparent, investor-focused leader in data and research uniquely equips us to support individuals, institutions, wealth managers, and advisors in navigating investment opportunities across major asset classes, styles, and strategies. From traditional benchmarks and unique IP-driven indexes to index design, calculation, and distribution services, our solutions span an investment landscape as diverse as investors themselves.

Morningstar Indexes Methodology Committee

The Morningstar Indexes Methodology Committee oversees all new index development, index methodology changes, and cessation of indexes for any indexes where Morningstar owns the intellectual property. This committee is also charged with ensuring that indexes align with Morningstar Research principles and values. The group comprises members of the index team with index research, product development, product management, client service, index implementation, and operation expertise who provide the first layer of governance over index design and methodology.

Morningstar Indexes Operations Committee

The Morningstar Indexes Operations Committee governs the processes, systems, and exception handling of the day-to-day management of all live indexes, including index rebalancing and reconstitution, restatements, market classification, and contingency management. The committee oversees the annual review of index methodology (as required by U.K. and EU benchmark regulations, or BMR), ensuring that methodologies remain fit for purpose and continue to achieve their stated investment objectives. The group comprises members of the index team with data, operations, corporate actions, product development, index launch, client service, and index management experience who provide the first layer of governance over index operations.

Morningstar Indexes Oversight Committee

The Morningstar Indexes Oversight Committee is responsible for the index oversight function as per the requirements of the U.K. and European BMR, providing independent oversight of all aspects of the governance of benchmark administration as required by the relevant BMR. Its remit extends to all calculation and administration-related business activities of Morningstar Indexes, including administration of Morningstar-owned benchmarks as well as client-owned benchmarks and index calculation. The oversight function is part of the organizational structure of Morningstar but is separate and independent from the index business, index management, and the other index committees.

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