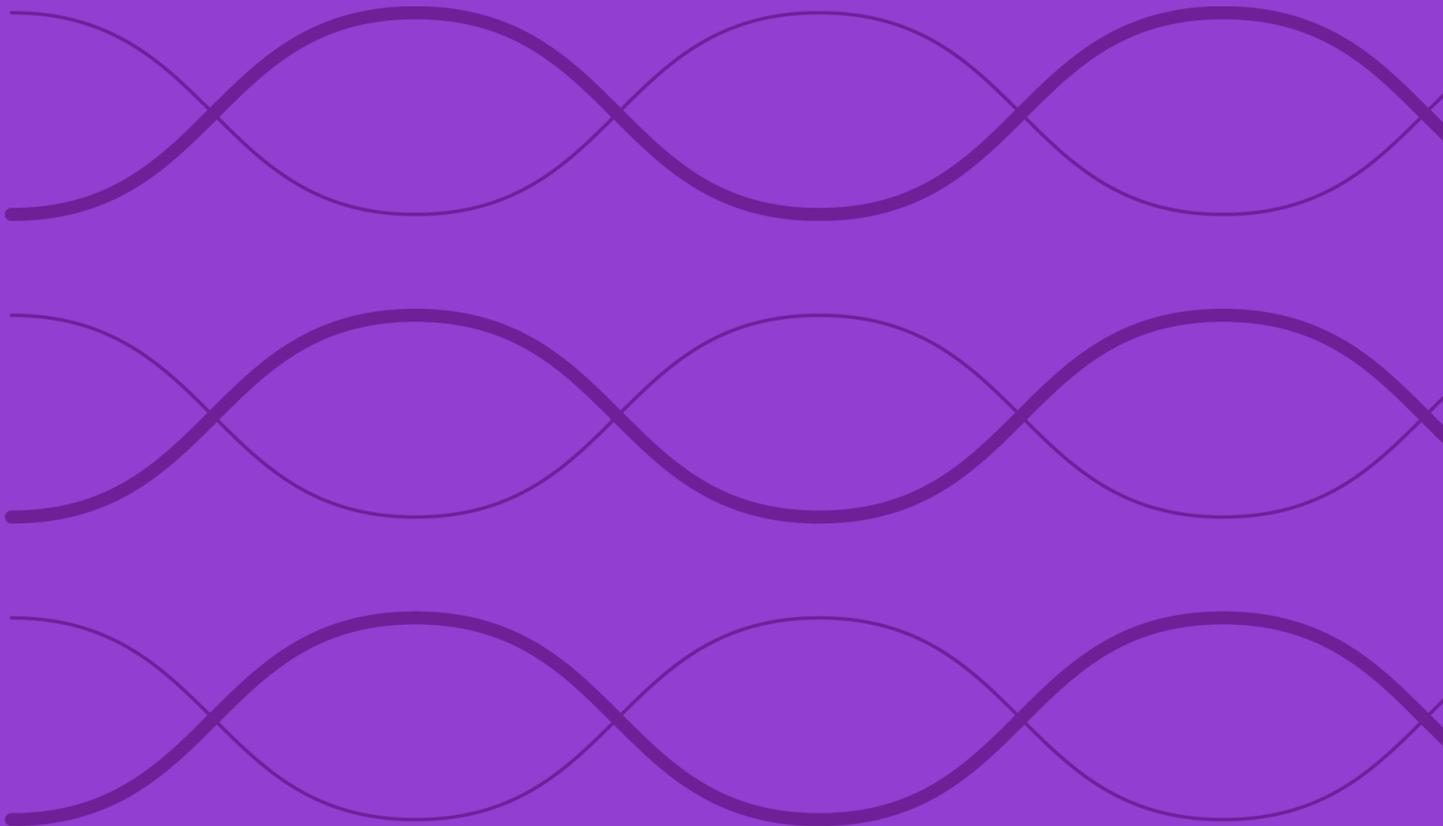


# Construction Rules for the Morningstar PitchBook Global Unicorn Industry Vertical Indexes



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## Overview

The Morningstar PitchBook Global Unicorn Industry Vertical Indexes track privately held, venture capital-backed companies with post-money valuations of at least \$1 billion. The index series represents a range of emerging themes experiencing the highest pace of innovation. Index constituents are derived from the Morningstar PitchBook Global Unicorn Index, and each index represents eligible unicorns from a select PitchBook analyst-curated industry vertical. The index methodology employs a proprietary three-factor pricing model to estimate daily valuations. The indexes deliver timely insights and unprecedented transparency into the performance and behavior of specific segments of the market.

The indexes do not incorporate environmental, social, or governance criteria.

For more information on PitchBook data, refer to Appendix 1.

## Index Inception and Performance Start Date

The inception date for the indexes is October 23, 2023, and the performance start date, when the first back-tested index value was calculated is March 22, 2021.

## Index Construction

### Methodology Summary

#### Starting Universe

- Morningstar PitchBook Global Unicorn Index
  - Represents privately held, venture capital-backed companies with post-money valuations of at least \$1 billion

#### Eligibility & Portfolio Construction

- All eligible companies in the PitchBook analyst-curated vertical are included
  - Weighted by post-money valuation with a security cap of 10%

#### Portfolio Construction

- Semiannual reconstitution
- Quarterly rebalancing
- IPOs retained for 180 days
- Corporate actions are reflected daily
- Calculated daily

Morningstar  
PitchBook Global  
Unicorn Industry  
Vertical Indexes

### Starting Universe

Constituents of the Morningstar PitchBook Global Unicorn Industry Vertical Indexes are derived from the Morningstar PitchBook Global Unicorn Index.

### Eligibility & Portfolio Construction

#### *Number of Stocks*

The number of stocks in the index is variable, subject to the size of the starting universe and the application of eligibility criteria at the time of reconstitution. For each vertical index, all eligible companies in the respective PitchBook analyst-curated vertical are included.

#### *Index Weighting*

The index is weighted by the last available post-money valuation of the constituents. For more details, refer to the [Morningstar Indexes Calculation Methodology rulebook](#). Constituent weights, including securities that are listed and being held for 180 days, are subject to a cap of 10%. The security cap is relaxed to 15% if the security count falls below 10 in the index.

## Index Maintenance and Calculation

### Reconstitution and Rebalancing

#### *Semiannual Reconstitution*

The index is reconstituted, where the membership is reset, semiannually in June and December, on the Monday following the third Friday. If Monday is a holiday, the reconstituted index is effective on the immediately following business day. Universe selection based on PitchBook data is as of the last trading day of April and October. The PitchBook market data used for reconstitution is as of the last trading day of May and November. Companies may be deemed unfit for inclusion based on deal structures or investor types. These companies will be identified by PitchBook analysts and will be removed from the universe.

A preliminary rebalancing report, or pro forma, indicating expected changes to the composition of the index will be available for review seven business days prior to the reconstitution effective date, excluding the Friday preceding the effective date. The reference date used to capture pricing for weight calculations is two business days prior to the proforma start date.

#### *Quarterly Rebalance*

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 rebalancing is as of the last trading day of February, May, August, and November.

### Corporate Actions

The treatment of corporate actions is as per the Morningstar Corporate Actions Methodology for Private Companies. Details can be found in the [Morningstar Corporate Actions Methodology for Private Companies](#).

### Index Calculation and Valuation Data

Details about index calculations can be found in the [Morningstar Indexes Calculation Methodology](#) rulebook. For details on valuations used for index calculation, please refer to Appendix 2.

### 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

### Appendix 1: PitchBook Data

- Headquartered in Seattle, PitchBook, a Morningstar company, is the largest provider of data on private markets. PitchBook employs over 1600 employees and covers 3.4 million private companies.
- PitchBook provides data, research and analysis on private and public companies. The company specializes in researching global M&A, private equity and venture capital investments along with all participating parties, including limited partners, investors, service providers and the professionals involved.
- PitchBook provides the investment community with a proprietary data platform, research tools and custom analysis to enable better investment decisions.

### Appendix 2: Valuations Used for Index Calculation

The valuations used in the index calculation are obtained from Morningstar's proprietary mark-to-model pricing methodology. Details can be found in the [Construction Rules for the Morningstar Mark-to-Model Pricing Methodology for Venture Capital-Backed Companies](#). Post-money valuations for secondary transactions are not considered.

### Appendix 3: Industry Vertical Identification and Definitions

The industry verticals selected for index construction are the largest and most active technology-enabled spaces within the venture capital-backed startup universe. Each vertical has received significant venture capital funding, witnessed meaningful exits, and has garnered a substantial amount of media attention.

As of October 2023, eleven verticals have been selected for construction:

- **AgTech:** Specialize in enhancing agricultural sustainability and productivity and offer a range of products and services including wireless sensors, hydroponic and aquaponic systems, remote-controlled irrigation systems, aerial imaging technology, biotech platforms, data-analysis software, automation tools, and accounting software. Sub-themes include biotechnology, indoor farming, animal agriculture, precision agriculture, and agricultural finance & eCommerce.
- incorporates limited forms of the technology.
- **BioPharma:** Exploit cellular and biomolecular processes to develop innovative therapeutics and technologies.
- **Climate Tech:** Develop technologies intended to help mitigate or adapt to the effects of climate change. Sub-themes include carbon emissions, clean fuels, renewable energy generation, grid infrastructure, low carbon mobility, sustainable foods, and sustainable packaging.
- **Cybersecurity:** Specialize in protecting enterprises from digital threats to business operations. Sub-themes include application security, data security, endpoint security, identity and access management, network security, and security operations.
- **E-Commerce:** Help merchants manage all aspects of the online, omnichannel buyer journey and provide technologies spanning pre-purchase product discovery through post-purchase order fulfillment.
- **Enterprise SaaS:** Build software to better enable workflows related to consumer relationship management, enterprise resource planning, supply chain management, accounts payable solutions, and key management solutions.
- **FinTech:** Employ technologies to offer or facilitate financial services usually offered by traditional banks including loans, payments, wealth or investment management, as well as software providers automating financial processes or addressing core business needs of financial firms. Companies within the Crypto or InsurTech verticals are excluded from the index.

- **HealthTech:** Provide technologies that improve healthcare delivery and operations or develop novel diagnostic or therapeutic technologies. Sub-themes include Healthcare IT, Digital Health, MedTech, PharmaTech, and BioPharma.
- **Mobility Tech:** Provide technologies and services that are disrupting the transportation, automotive, or shipping industries. Sub-themes include advanced air mobility, auto commerce, fleet management and connectivity, electric vehicles, micromobility, autonomous driving, marine mobility, last-mile delivery, ride hailing, and public mobility solutions.
- **Supply Chain Tech:** Provide technologies and services that are changing how global supply chains are managed and operated, including improved visibility across delivery and supply channels, quicker shipping capabilities, and the ability to source products on demand. Sub-themes include enterprise supply chain management software, freight technology, warehousing technology, and last-mile delivery services.

## 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.

[www.indexes.morningstar.com](http://www.indexes.morningstar.com)

## Contact Us

[indexes@morningstar.com](mailto:indexes@morningstar.com)

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