



Kaiko

Indices

Vinter Valour Benchmark Family

About Kaiko Indices

Kaiko Indices offers institutional-grade benchmarks and indices, setting the standard for reliability and transparency in the digital asset market. As a regulated Benchmark Administrator under the EU BMR framework and compliant with IOSCO principles, we empower exchanges, asset managers, and financial institutions with trusted data solutions that support robust settlement and risk management practices.

Introduction

The Vinter Valour Benchmark Family is a family of benchmarks. The benchmarks are developed to provide a rule-based and transparent way to track the value of a portfolio of cryptographic assets.

Each index measures the value of an investment strategy. The governing rules of the relevant Index, including the methodology of the Index for the selection and the rebalancing of the components of the Index, description of market disruption events, and adjustment rules are based on predetermined and objective criteria as defined in this methodology.

This methodology clearly determines what constitutes an active market for the purposes of each index, and establishes the priority given to different types of input data. The methodology takes into account factors like the size and liquidity of the market, the transparency of trading, the positions of market participants, market concentration, and the adequacy of any sample to represent the market or economic reality that the benchmark is intended to measure.

About Valour

Valour enables investors to simply and securely buy digital assets through their regular bank or broker. Founded in 2019, Valour is backed by an acclaimed and pioneering team with decades of experience in financial markets and digital assets.

Definitions

Crypto Asset:

A digital representation of value that is cryptographically secured.

Transaction:

A trade between two parties occurring on an exchange that consists of time, price, volume.

Validated Transaction:

A transaction registered and validated by Vinter.

Volume:

The quantity of a transaction.

UTC:

Coordinated Universal Time.

CET/CEST:

Central European Time or Central European Summer Time.

Selected Exchange:

An exchange that contributes with input data in the calculation.

Eligible Exchange:

An exchange that fulfills all eligibility criteria.

Introduction

Index Advisory Board

The Index Advisory Board consists of experts in crypto assets, trading, quantitative finance, and statistics. Its role is to advise, make recommendations, and communicate with the Product and Development department as well as the Index Committee about changes to and adherence to the index methodology. The Index Advisory Board will take several factors into consideration when making recommendations, including whether an asset has any known security vulnerabilities, critical bugs, or undue exposure to 51% attacks.

The Index Advisory Board meets at 14:00 UTC at least four business days prior to the rebalancing date. Target weights per asset and potential changes to the index methodology are published no later than 24 hours after the meeting.

Indices

VDAB10

The Vinter Valour Digital Asset Basket 10 Index ("VDAB10") tracks the 10 largest Digital Assets based on the average monthly market capitalization on the 15th calendar day of the month, for the two most recent months. The constituents are weighted by their current market capitalization, with a maximum weight of 30%. If a constituent exceeds the maximum weight, its weight will be reduced to the maximum weight and the excess weight will be redistributed proportionally across all other index components. This process is repeated until no component has a weight exceeding the maximum weight. The selection of constituents and their target weights is rebalanced quarterly on the last business day of the month.

Details

Full Name:

Vinter Valour Digital Asset Basket 10 Index

Ticker:

VDAB10

Base Date:

2021-01-01

Base Value:

1000.00

Vinter API:

vnsv-mc-200-d

Construction

Asset Selection:

Top 10 by average market capitalization.

Target Weights:

Current market capitalization, maximum 30%.

Rebalancing Frequency:

Quarterly, starting end of January.

Indices

VDAB10

Index Construction

Asset Universe

The default asset universe consists of all eligible constituents. It is possible to adjust the default criteria and to restrict the universe to certain categories of assets - in case we do this will be clearly stated in the index description.

Asset Selection

The index constituents are selected from the asset universe. The selection process can be based on a number of factors such as returns, volatility, market capitalization, trading volume, or a combination thereof.

Assets are selected on the review date, which is five business days prior to the rebalancing date.

If it is not possible to reach the intended number of constituents, the Index Committee can decide to either include non-eligible constituents or allow the index to have fewer constituents than intended. The decision shall be made publicly available.

Target Weights

The target weights can be determined based on a number of factors such as returns, volatility, market capitalization, trading volume, or a combination thereof - with or without smoothing over time. Caps and floors can be included.

Target weights are calculated on the review date, which is five business days prior to the rebalancing date. The default is a market capitalization-weighted index, in which each asset is weighted by its portion of the total market capitalization of all index constituents. The target weight per asset is unchanged between rebalances.

Rebalancing

All indexes are rebalanced periodically, by default monthly, with the rebalancing date set to the last business day of the month. Rebalancing involves the selection of constituents and calculation of their target weights. Calculations are done using the closing prices on the rebalancing date. The new quantities per asset are used on the opening of the day after rebalancing. After the rebalance, the portfolio's weights per asset are updated so that they equal the target weights per asset.

Indices

VDAB10

Eligible Constituents

Assets are eligible as index constituents if they meet the [eligibility criteria listed in Vinter's benchmark statement](#).

Eligible Exchanges

For an exchange to be eligible it must meet [Vinter's Exchange Minimum Eligibility Criteria](#).

Every trading pair has a list of eligible exchanges, chosen so that each index is accurate, trusted, and functional.

Eligible exchanges can be temporarily disabled, resulting in the number of selected exchanges being fewer than the number of eligible exchanges. Under extraordinary circumstances (such as a shutdown of several exchanges) new exchanges can be added at the discretion of the Index Committee in accordance with the Rules of Procedure for and Instructions to the Index Committee.

Calculation

The index value is given by the weighted sum over all constituents of quantity times price divided by a divisor.

The quantity per asset is unchanged between rebalances and is set such that the target weight per asset is reached after rebalancing. The divisor enforces index continuity on rebalancing. It includes a daily accrued fee, by default set to zero. The divisor is defined so that the index starts at a certain start value, which ensures each index tracks the value of a certain amount of capital invested on the start date.

Market Capitalization

The market capitalization is given by price times circulating supply. For Proof-of-Work crypto assets, a block explorer is used to get the circulating supply. For crypto assets issued on smart contract platforms, such as ERC20 issued on Ethereum, the circulating supply is calculated by starting with the total supply and removing the locked tokens e.g. those held by the founding organization.

If the above is insufficient or inapplicable to determine the circulating supply, other readily available data sources determined by the Company's Product Maintenance Department might be considered.

Foreign Exchange Rates

The index value and constituent crypto assets are priced in USD. If an exchange-traded product is not denominated in USD the relevant foreign exchange rate needs to be applied.

Indices

VDAB10

Adjustments

Calculation errors detected within a trading day are corrected immediately, intraday tick data is not corrected retrospectively. Calculation errors that are older or based on erroneous input data are corrected if technically possible and economically viable. If significant differences exist, index values can also be corrected retrospectively, at the maximum back to the latest date of rebalancing.

Circumstances that may require adjustments include, but are not limited, to the following:

- Longer or recurring outages of one or more exchanges.
- Misconduct of an exchange or of an asset has been noticed.
- A sharp decline in trading volumes of an asset.
- A sharp decline in trading volumes of certain exchanges or larger areas of the market.
- An eligible asset does not trade anymore permanently or for an extended period of time.

For all extraordinary events that result in a deletion, the funds received from the sale of the deleted component or components will be reallocated to the remaining components of the index based on their weights at the latest regular review. If necessary and economically viable, the divisor will be adjusted so the price of one unit of the index and its corresponding exchange-traded product represents the same value as before the event.

The Calculation Agent will use or change the data at its own discretion, if:

- input data are or appear to be qualitatively inferior;
- different sources provide different data; or
- a situation is not covered by the index rules.

Due to the dynamic market in the digital assets space the index methodology, parameters and thresholds will be reviewed at least once a year. The goal of such adjustments will always be to improve the robustness, transparency, reliability, and integrity of the index. Feedback from market participants will be considered. Any changes will be communicated by the Benchmark Administrator with a lead time of at least three days, whenever possible, to enable customers to adjust their processes. Due to certain, currently unforeseeable events, the methodology might need adjustments on shorter notice. Communication will in that case be made as soon as possible.

Forks

For handling of forks, please read the [Fork Policy](#) found in the Crypto Assets Benchmark Statement.

Indices

VDAB10

Constituent Pricing

Overview

All indexes are calculated from validated transactions on selected exchanges. Index values are published soon after the time window ends. The time window during which transactions are obtained and the calculation method vary depending on the index frequency. There are three possible frequencies with which index values are updated: real-time, hourly, and daily. Each index consists of the following parts:

- **Trading Pair:** The base and quote currency.
- **Structure:** Plain or composite.
- **Frequency:** Real-time, hourly, or daily.

Plain Structure

An index with a plain structure uses transactions from one trading pair.

Real-time Frequency

Each Vinter real-time index is updated every 10 seconds and calculated as follows:

- Obtain validated transactions on the trading pair from selected exchanges during the last 10 seconds.
- Select the last transaction from each exchange.
- Take the median of the selected transactions.

Hourly Frequency:

Each Vinter hourly index is the average of the previous hour's real-time index values. It is thus a Time Weighted Average Price (TWAP) of median prices.

Daily Frequency:

Each Vinter daily index is an average of the real-time index values in a specified time window, from 11:00 to 15:00 UTC.

Indices

VDAB10

Administration

Vinter is the benchmark administrator of the Vinter Valour Benchmark Family and the central recipient of input data with the ability to evaluate the integrity and accuracy of input data on a consistent basis. Vinter is responsible for the development of the index and controls all aspects of the provision of the benchmark. Vinter has established a permanent and effective oversight function, governance processes subject to periodic reviews and audits, policies regarding complaints, ethics, conflicts of interest, and contingency, and has established a clear internal organizational structure with consistent roles and responsibilities to identify, prevent, disclose, mitigate, and manage conflicts of interest. The European Securities and Markets Authority has included Invierno AB in its register of Benchmark Administrators approved to carry on the regulated activity of administering a benchmark.

Calculation

Vinter is the calculation agent of the Vinter Valour Benchmark Family and is responsible for determining the value of the index described in the index methodology. Vinter calculates the index values in accordance with the index methodology. Upon the request of the benchmark administrator, the calculation agent shall provide all information available on the composition and details of the calculation of the requested index.

Document Versions

Version 1.0

Initial Version. Published April 9th, 2021.

Version 1.1

Updated eligibility criteria requiring an asset to be legally deemed a security to be excluded. Published December 9, 2021.

Indices

Disclaimer

Any product(s) offered with the indexes described in this methodology as underlying is not in any way sponsored, endorsed, sold, or promoted by Invierno, reg. no. 559207-4172 (“Vinter”). Vinter does not make any warranty or representation whatsoever, expressly or impliedly either as to the results to be obtained from the use of the index(es) “Index” described, licenses, used, or referenced under any Programme or Prospectus and/or the figure at which the Index stands at any particular time on any particular day or otherwise. The Index is compiled and calculated solely by Vinter. However, Vinter shall not be liable (whether in negligence or otherwise) to any person for any error in the Index and Vinter shall not be under any obligation to advise any person of any error therein. Vinter is a registered trademark owned by Invierno AB. Invierno AB and its indexes are protected by various intellectual property rights. All third-party use of Vinter and its indexes require by law a licensing agreement with Invierno AB. The Index is a product of Invierno AB. Any Programme referencing the Index is not sponsored, endorsed, sold, or promoted by Vinter and/or its affiliates, and none of such parties makes any representation regarding the advisability of investing in such product(s) nor do they have any liability for any errors, omissions, or interruptions of the Index. The Programme is in no way sponsored, endorsed, sold, or promoted by Vinter and its Licensors and neither of the Licensors shall have any liability with respect thereto. Vinter is not a registered investment advisor, tax advisor or broker/dealer. The content of the index methodology or its related documents underlying is intended only to provide general and preliminary information and shall not be construed as investment, tax, legal or financial advice. The reader shall ensure that all of his or her investment decisions are not made based on the content of this document and shall be solely responsible for all financial losses made in connection with investment decisions. Nothing contained in the index methodology or its related documents constitutes a solicitation, recommendation, endorsement, or offer by Vinter or any third party associated with Vinter to buy or sell any financial instruments in this or any other jurisdiction. Although best efforts are made to ensure that all information on the methodology documents is accurate and up to date, occasionally unintended errors and misprints may occur. The index owner grants the benchmark administrator an exclusive, royalty-free, non-transferable, non-sublicensable license to use the index owner's intellectual property rights to fulfil the benchmark administrator's obligations under the index agreement and the Benchmarks Regulation, including registration of identifiers for indexes. Vinter is a registered Benchmark Administrator by Finansinspektionen (FI) and the European Securities and Markets Authority (ESMA) under Article 34 of the European Benchmarks Regulation (2016/1011).

CONTACT

Paris

2 rue de Choiseul
75002 Paris
France

Singapore

9 Battery Road
Singapore
049910

New York

750 Lexington Ave,
New York, NY 10022
USA

London

73 Watling Street
London
EC4M 9BJ



www.kaiko.com



This content is the property of Kaiko, its affiliates and licensors. Any use, reproduction or distribution is permitted only if ownership and source are expressly attributed to Kaiko. This content is for informational purposes only, does not constitute investment advice, and is not intended as an offer or solicitation for the purchase or sale of any financial instrument.

© 2022, Kaiko