

Index Methodology

Vinter Pando Crypto Indexes



Introduction

The Vinter Pando Crypto Indexes are a family of benchmarks. The indexes are developed to provide a rule-based and transparent way to track the value of a portfolio. Each index measures the value of an investment strategy.

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.

Pando Asset AG ("Pando") is an investment specialist whose investment team consists of seasoned investment experts.

Invierno AB ("Vinter") is a pioneering index provider specialized in crypto assets, playing a key role in the emerging crypto ETF industry. The firm collects digital asset data from hundreds of sources, transforming proprietary strategies into investable products. Learn more at vinter.co.

Indexes

PANDO6

The Vinter Pando Crypto Basket 6 Index (PANDO6) contains the six largest crypto assets. The index is rebalanced quarterly. The weight per asset is proportional to the square root of its market capitalization. The purpose of the index is to provide a diversified portfolio where the two largest assets are not overpowering the basket. The use of square root results in increased weight of smaller assets and a reduction in weight of larger assets.

To illustrate the effect of applying square root, consider a portfolio with six assets. The two largest assets have a weight of 60% and 30% respectively and the remaining four 3% + 3% + 2% + 2%. Applying a square root increases the weight of the smaller assets from 10% to a total of 32%. The two largest assets decrease in weight to 68%. The increased weight in the smaller asset is financed by the largest asset which is weighted at 40% after applying the square root.

Construction

- **Asset universe:** Eligible constituents.
- **Asset selection:** Top 6 by 90 days average market capitalization.
- **Target weights:** Square root of current market capitalization.
- **Rebalanced:** Quarterly, starting end of January.
- **Rationale:** Invests in the largest assets with increased weight in the smaller assets thanks to reduced weight in the larger asset.

Details

- **Currency:** USD
- **Type:** Price return
- **Base date:** 2021-01-01
- **Base value:** 1000.00
- **Dissemination:** Daily 17:00 CET

Identifiers

- **Long name:** Vinter Pando Asset Crypto Basket 6 Index
- **Short name:** PANDO6
- **ISIN:** SE0017767783
- **FIGI:** BBG015DL2M96
- **Bloomberg:** PANDO6
- **Refinitiv:** .PANDO6
- **Vinter API:** vnpa-pando-6-d

Index Construction

Asset Universe

The default asset universe consists of all eligible constituents. It is possible to restrict the universe to certain categories of assets.

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.

In the asset selection, data up to five business days prior to the rebalancing date is used.

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.

Rebalancing weights

The Rebalancing 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.

In the calculation of Rebalancing weights, data up to five business days prior to the rebalancing date is used.

The Rebalancing weight per asset is unchanged between rebalances.

Rebalancing

All indexes are rebalanced periodically, by default quarterly, with the rebalancing date set to the last business day of the month. Rebalancing involves selection of constituents and calculation of their Rebalancing 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 Rebalancing weights per asset.

Eligible Constituents

Crypto-assets trading on eligible exchanges are eligible as index constituents if they:

1. are a cryptographically secured digital bearer instrument;
2. are not index tokens, stablecoins or pegged to another asset such as currencies or commodities;
3. are not an ongoing Initial Coin Offering;
4. are not deemed - or alleged - a security or fraudulent by a public financial regulatory authority with jurisdiction over the constituent or its wrapper;
5. are supported by the industry including market makers, custodians and regulated exchanges;
6. can be deposited to and withdrawn from least two eligible exchanges;
7. are freely traded and can be freely held for the foreseeable future;
8. have for the past month had a daily trading volume that exceeds USD 10 million on at least two eligible exchanges;
9. allow for cold storage;
10. have an average market capitalization above \$1 billion the last month;
11. trade against a G10 currency (AUD, CAD, EUR, JPY, NZD, NOK, GBP, SEK, CHF, USD); and
12. are not designed to be private.
13. provide economic incentives for the blockchain's long-term maintenance.

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 Rebalancing 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.

Constituent Pricing

Assets are priced using Vinter's single asset indexes, which are price return indexes. The Benchmark Statement of this methodology defines the eligibility criteria for input data used to determine the benchmark.

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.

Administration

Vinter is the benchmark administrator of the Vinter Pando Crypto Indexes 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 Pando Crypto Indexes 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.

Definitions

- **Crypto asset:** A digital representation of value that is cryptographically secured.
- **Volume:** the quantity of a transaction.
- **CET:** Central European Time.
- **Business day:** A day when the SIX stock exchange is open for trading.

Document Versions

Version 1.0 Initial version. December 15, 2021.

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