



INDEX GUIDE

Sygnum Platform Winners Index

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1 INTRODUCTION

1 Introduction

In accordance with Art. 13 No. 1 (a) of Regulation (EU) 2016/1011 of the European Parliament and of the Council of 8 June 2016 (the "Benchmark Regulation"), this document provides the rules for establishing, calculating and maintaining the Sygnum Platform Winners Index ("MOON").

1.1 Objective of the Indices

The aim of the Sygnum Platform Winners Index ("MOON") is to track the financial performance of the largest native crypto assets of original protocols.

The index reflects the trend towards blockchain protocols forming the basis of economic activity in future, while eliminating the risk of any individual protocol failing or being superseded by better technology. The index will always track the most successful platforms.

The weighting methodology provides a forward looking insight into protocol success by looking at factors beyond backward looking measures of success such as market capitalisation and liquidity, and also looks at public interest in the protocol and the developer community's interest and commitment to the platform.

1.2 About 21Shares

Jura Pentium Limited, the parent company of 21Shares AG, is a company that makes investing in crypto-assets as easy as buying a stock.

Jura Pentium Limited (the "Index Owner") makes no warranties or representations as to the accuracy and/or completeness of the Index and does not guarantee the results obtained by persons using the index in connection with trading funds or securities. The Index Owner makes no representations regarding the advisability of investing in any fund or security. The Index Owner reserves the right to update the rules in this index guide at any time. The Index Owner also reserves the right to make, in exceptional cases or in temporary situations, exceptions to the rules in this index guide.

The index is the property of Jura Pentium Limited. The Index Owner has selected an index administrator (MV Index Solutions GmbH, "MVIS") to maintain the indices.

The use of the index in connection with any financial products or for benchmarking purposes requires a license. Please contact Jura Pentium Limited for more details.

1.3 About Sygnum

Sygnum is the world's first digital asset bank, and a digital asset specialist with global reach. With Sygnum Bank AG's Swiss banking licence, as well as Sygnum Pte Ltd's capital markets services (CMS) licence in Singapore, Sygnum empowers institutional and private qualified investors, corporates, banks and other financial institutions to invest in the digital asset economy with complete trust. Sygnum operates an independently controlled, scalable and future-proof regulated banking platform. The interdisciplinary team of banking, investment and Distributed Ledger Technology (DLT) experts is shaping the development of a trusted digital asset ecosystem. The company is founded on Swiss and Singapore heritage, and operates globally.

1.4 About MV Index Solutions GmbH

MVIS® is a registered trademark of Van Eck Associates Corporation and therefore protected globally against unlawful usage. MVIS has selected an index calculation agent to calculate the indices.

1 INTRODUCTION

1.5 Approval of Index Methodologies

The Index Owner has established the index and its individual methodology covered in this Index Guide. A detailed written "Procedure for Index Development" describes the steps and approvals required to develop, document and approve an index and its methodology. The intention of the Procedure for Index Development is to ensure that the methodology of an index meets the requirements of Art. 12 of the Benchmark Regulation and is approved and implemented according to a robust and reliable process. The methodology for each index and its methodology covered in this Index Guide has been analysed by the Index Administrator's Index Operations department in order to ensure that it is robust and reliable, has clear rules on use of discretion, allows sustainable validation (based on reasonable back testing) and is traceable and verifiable. Furthermore, the size, liquidity and transparency of the underlying market for each methodology has been tested and particular circumstances for each relevant market have been taken into account.

Each index methodology and the related detailed analysis was presented by the Index Operations Department to the Independent Oversight Function for its approval. Based on the aforementioned approval process and its documentation each Index Methodology was presented to the Management Board (Geschäftsführer) of the Index Administrator for final approval.

1.6 Review of this Index Guide

According to Art. 13 No. 1 (b) of the Benchmark Regulation, the Index Administrator reviews this Index Guide on an annual basis and immediately in case of special circumstances that require a review. The review takes place in meetings attended by the Independent Oversight Function and the Management Board of the Index Administrator. If changes to this Index Guide are considered necessary, the process described in section 4.7 applies.

2 GENERAL DEFINITIONS

2 General Definitions

2.1 Review Schedule

The index is rebalanced quarterly (the "Quarterly Rebalance Date").

The reviews for the index are based on the opening data (adjusted for reviewed amount outstanding) on the fourth but last business day in January, April, July and October. If a security does not trade on a business day, then the last available price for this security will be used.

A "business day" means any day (other than a Saturday or Sunday) on which commercial banks and foreign exchange markets settle payments in Frankfurt.

Adjustments to constituents will be announced four business days prior to the first business day of the next month at 23:00 CET/CEST.

The index is rebalanced at 17:00:00 CET/CEST of the last trading day in each review month. "Trading days" are published in the 21Shares Trading Calendar.

2.2 Pricing Source

For each component price, the respective CCCAGG Price Index by CryptoCompare (www.cryptocompare.com) is used. CCCAGG is a weighted average of the latest available trading price at each exchange.

For clarification, 'CCCAGG' means CCCAGG as published on the website with the following deviations:

- Exchanges may be excluded if they are not licensed to be added to an index.
- Exchanges are not immediately added/removed, but only on a monthly basis or if required following quality reviews from CryptoCompare.
- Values are not backadjusted.

3 SYGNUM PLATFORM WINNERS INDEX

3 Sygnum Platform Winners Index

3.1 Index Universe

The index universe includes all crypto currencies traded on the exchanges covered by the CCCAGG pricing provided by Crypto Coin Comparison Ltd. ("CryptoCompare").

3.2 Eligible Index Universe

The eligible index universe includes the largest native crypto assets of original protocols only. As a consequence, the index does not include:

- Crypto assets that do not represent the protocol layer but rather second layer applications and crypto assets which are issued on another protocol (such as ERC-20, TRC-10, Omni layer, etc),
- Any crypto assets whose value is derived from or pegged to another asset,
- Crypto assets without economic incentives for the long term maintenance of the platform,
- Any forks or copies - from each crypto asset family of forks and copies, only the largest one is included in the index.

The index may include all crypto assets as described above, except those that are affected by the regulatory and operational restrictions listed below. The index does not include crypto assets that:

- have been newly created in the last six months,
- are not accepted by the Swiss Stock Exchange (SIX) as an underlying as defined in the Sygnum Platform Winners Index ETP prospectus,
- are not accepted by the eligible market makers supporting the ETP - the list of eligible market makers is maintained by the index owner,
- do not have a reliable custody solution of an acceptable standard.

3.3 Index Selection

The eligible universe (as defined above) is ranked based on several factors that assess the market acceptance and growth of the ecosystem built on the protocol.

These are:

1. Capital invested,
2. Financial market interest,
3. Real world adoption,
4. Developer commitment.

The metrics used to measure these factors are as follows:

1. Market capitalisation: based on all coins in issue,
2. Traded volume: quarterly average of the 24-hour traded volume on eligible exchanges as defined by index owner,

3 SYGNUM PLATFORM WINNERS INDEX

3. Public interest in the crypto asset: influence score calculated by CryptoCompare based on social media interest and website traffic, minus code repository points,
4. Developer resources: Code Repository Score calculated by CryptoCompare based on Github activity, and developer headcount dedicated to the project.

The four metrics are normalised with Bitcoin as the baseline, and combined with an equal weighting assigned to each metric (25%).

- Calculate the relative scores V of each crypto asset t with reference to Bitcoin for each of the 4 metrics (i):

$$V_{rel,t,i} = \frac{V_{ti}}{V_{Bitcoin,i}} * 100, \text{ where } i = 1, 2, 3, 4.$$

- Calculate the summed score for each crypto asset by adding the four values:

$$V_t = \sum_{i=1}^4 V_{rel,t,i}.$$

The developer resources metric combines the Code Repository Score and the developer headcount in a similar manner, giving the former a 75% weight, and the latter 25%.

The top ten ranked crypto assets are included in the index.

The total number of eligible qualifying crypto assets may be less than ten at a given time.

3.4 Weighting Scheme

The index constituents are weighted based on the scores calculated for the component selection.

$$W_t = \frac{V_t}{S}, \text{ where } S = \sum_{t=1}^T V_t \text{ and } T \text{ is the number of selected crypto assets.}$$

3.5 Index Dissemination and Identifiers

The index is calculated with the constituent prices converted to USD, on a daily basis between 00:00 and 24:00 (CET/CEST). Dissemination is in USD. Real-time index values are calculated with the latest available CCCAGG prices each 15 seconds. The closing value is calculated at 17:00:00 CET/CEST with fixed 17:00 CET/CEST exchange rates.

The Sygnum Platform Winners Index has the following identifiers:

Index Type	ISIN	SEDOL	WKN	Bloomberg	Reuters
Price Return Index	DE000SLA9Q63	BJVQ1P1	SLA9Q6	MOON	.MOON

The index was launched on 26 November 2019 with an index value of 100.00 as of 1 November 2019 and an index history starting on 31 December 2016.

Index values prior to 1 November 2019 were backcasted based on a simulated October 2019 review and the respective weight factors.

4 ONGOING MAINTENANCE

4 Ongoing Maintenance

4.1 Changes in Amount Outstanding

Changes in the amount of crypto assets outstanding will not result in an adjustment in the index during the quarter but only at the next quarterly review.

4.2 Treatment of distributions and changes in index constituent protocols

Airdrops or other distributions received by holders of the index constituent crypto assets do not affect the index value.

In the case of protocol forks of an index constituent crypto asset, the legacy protocol remains in the index and newly created crypto assets are ignored. Crypto assets spooned onto another network are not considered for constituent selection.

None of these instances will result in a change in the Index Divisor.

4.3 Changes to Pricing (CCCAGG)

In case an exchange is added to CCCAGG or removed from it, the index divisor will not be adjusted.

4.4 Trade Suspensions and Market Distortions

There are certain extraordinary circumstances which might require the deletion of an index constituent before the next rebalancing date. These circumstances cover situations where the index constituent becomes untradable and/or no prices can be sourced for the crypto asset.

- Longer or recurring outages of an exchange,
- Misconduct of an exchange or with a crypto asset,
- Sharp decline in trading volumes of certain crypto assets, certain exchanges or the crypto market in general,
- Implementation of certain investment restrictions,
- A crypto asset does not trade any more permanently or for an extended period of time.

For all events that result in a deletion from the indices, the deleted component will be replaced with the highest ranked non-component at the latest review. The replacement will be added with the same weight as the deleted component; the index divisor will not be adjusted.

If the number of eligible crypto assets is less than ten, the deleted component will not be replaced but rather its weight in the index will be distributed proportionately across the remaining index constituents.

4.5 Index Corrections

- Index corrections distinguish between calculation errors and incorrect input data.
- Calculation errors detected within a trading day are corrected immediately. Intraday tick data are 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.

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4.6 Review of Index Concept

Due to a very dynamic market of crypto assets the index methodology, parameters and thresholds will be reviewed at least once a year. Market participants feedback is being considered in the process whether or not to make amendments to the methodology and the data sourcing process. Any changes will be communicated by 21Shares and MVIS with a 60-day lead time to enable customers to adjust their processes.

4.7 Changes to the Index Guide

Any changes to the Index Guide will be reviewed and approved by the index owner and MVIS's Legal and Compliance Department. Legal and Compliance may also request a conclusive description and further information on any change and may consult the operations department on such changes. The key elements to be analysed in this phase of the change process are robustness, transparency, reliability and integrity. The result of the review will be communicated to the operations department. The email will be archived by the operations department.

In case of changes that might immediately change the composition of an index or must be considered material for any other reason also need to be approved by the Independent Oversight Function ("IOF") prior to their publication and implementation.

In case of material changes an advance notice will be published and provided to users. MVIS will generally disseminate a notification related to an Index Guide change 60 days prior to the change. A shorter period of time may be applied at MVIS's discretion if the relevant index has not been licensed for a financial product to a third party. The notice will describe a clear time frame that gives the opportunity to analyse and comment upon the impact of such proposed material change. Any material comments received in relation to the Index Guide change and MVIS's response to those comments will be made publicly accessible after any consultation, except where confidentiality has been requested by the originator of the comments.

4.8 Discretion regarding the Use of Input Data

Pursuant to Art. 12 No.1. (b), MVIS has established the following rules identifying how and when discretion may be exercised in the administration of an index.

In case input data are or appear to be qualitatively inferior or different sources provide different data, or a situation is not covered by the index rules, MVIS may use or change the data at its own discretion according to the following discretion policy after a plausibility check. This may include

- Liquidity and size data,
- Event information,
- Other secondary data.

Any changes to input data that MVIS intends to apply because of missing data, different data from different sources or other information concluding the inappropriateness or incorrectness of data must subject to reasonable discretion. The decision on any change must be required, appropriate, commensurable and in line with the respective index scope and objective and must reasonably consider in a balance weight the interest of Users, investors in related products and the integrity of the market.

Index operations ensures consistency in the use of discretion in its judgement and decision. Employees involved in the operations team must have shown the respective experience and skills. Significant decisions

4 ONGOING MAINTENANCE

are subject to sign-off by a supervisor. In case of material changes to data the relevant situation will be analysed in detail, described and presented to the IOF and discussed and reviewed with the IOF. The broad range of possible data quality problems does not allow to define specific steps for each possible instance. MVIS will always weight the different interest of the index users, the integrity of the market and other involved parties and determine the least disadvantageous measure that equally considers the relevant interests best.

In order to avoid individual decisions on the use of data in similar cases for the future an update of the index rules can be taken into consideration if applicable. Other possible mitigation measures are the change of input data sources or providers and/or own data research where possible and reasonable.

Records are kept about material judgement or discretion by MVIS and will include the reasoning for said judgement or discretion.

4.9 Input Data and Contributor Selection

According to the input data requirements under Art. 11 of the Benchmark Regulation, the following shall apply with regard to the input data used for the management and provision of an index and the relevant input data providers ("Contributors"):

- the input data shall be sufficient to represent accurately and reliably the market or economic reality that the benchmark is intended to measure;
- the input data shall be transaction data, if available and appropriate. If transaction data is not sufficient or is not appropriate to represent accurately and reliably the market or economic reality that the index is intended to measure, input data which is not transaction data may be used, including estimated prices, quotes and committed quotes, or other values;
- the input data shall be verifiable;
- clear guidelines regarding the types of input data, the priority of use of the different types of input data and the exercise of expert judgement, to ensure compliance with the Index Guide and index methodology and the aforementioned requirements are defined in the Code of Conduct for Contributors; and
- where an index is based on input data from Contributors, MVIS will obtain, where appropriate, the input data from a reliable and representative panel or sample of Contributors so as to ensure that the resulting index is reliable and representative of the market or economic reality that the index is intended to measure.

In order to control the quality of contributors, MVIS will conduct the following controls:

- Evaluate market share, reputation, quality and cost of possible input data sources and providers before selecting them on the basis of the gathered information and data;
- Compare the input data of one Contributor with the input data from one or more other Contributors in order to ensure the integrity and accuracy of the input data and in case of bad quality replace a Contributor with another Contributor.

MVIS will not use input data from a contributor if it has any indication that the Contributor does not adhere to its Code of Conduct for Contributors and in such a case shall obtain representative publicly available data.

5 CALCULATION

5 Calculation

5.1 Index Formula

The index is calculated using the Laspeyres' formula:

$$Index = \frac{\sum_{i=1}^n p_i * q_i * cf_i * fx_i}{D} = \frac{M}{D}.$$

Where (for all crypto assets (i) in the Index):

- p_i = price,
- q_i = amount outstanding,
- cf_i = weighting cap/floor factor (if applicable, otherwise set to 1),
- fx_i = exchange rate (to index currency),
- M = market capitalisation of the index,
- D = divisor.

5.2 Input Data

The following rounding procedures are used for the index calculation:

- Rounding to 2 decimal places:
 - index values,
- Rounding to 6 decimal places:
 - divisors (D),
- Rounding to 18 decimal places:
 - prices (p_i),
 - exchange rates (fx_i),
 - weighting cap/floor factors (cf_i).

5.3 Divisor Adjustments

Index maintenance - reflecting changes in amount outstanding, events, addition or deletion of crypto assets to the Index - should not change the level of the index. This is accomplished with an adjustment to the divisor. Any change to the crypto assets in the index that alters the total market value of the index while holding crypto asset prices constant will require a divisor adjustment.

$$Divisor_{open} = Divisor_{close} * \frac{\sum_{i=1}^n p_i * q_i * cf_i * fx_i \pm \Delta MC}{\sum_{i=1}^n p_i * q_i * cf_i * fx_i}.$$

ΔMC = Difference between closing and adjusted closing market capitalisation of the index.

5 CALCULATION

5.4 Data Correction and Disruptions

MVIS will usually receive information about errors or disruption from calculation agent, index owner, client, internal systems (IT) or by monitoring the respective output.

Incorrect or missing input data will be corrected immediately:

- The error is immediately communicated to the calculation agent, if applicable.
- Calculation agent will be asked to investigate the reason for the error.
- An email will be sent to all affected clients to inform them about the error; this includes the reason for the issue and an estimate on when the issue will be solved.
- MVIS recalculates missing EOD data points and disseminates to vendors and clients.

In case of a material error,

- Legal and Compliance to check the relevant agreements for liability of the calculation agent.
- If MVIS identifies any conduct that may involve manipulation or attempted manipulation of an index by calculation agent it will report this to the regulator.
- Where possible and economically reasonable MVIS will try use another calculation agent.

Investigations and communication regarding disruptions with calculation agents will be handled by Compliance and Senior Management. They are either caused by disruptions in calculation or dissemination, which might affect different servicers.

- The disruption is immediately communicated to the calculation/dissemination agent, if applicable.
- Calculation/dissemination agent will be asked to investigate the reason for the disruption.
- An email will be sent to all affected clients to inform them about the disruption; this includes the reason for the issue and an estimate on when the issue will be solved.
- MVIS prompts calculation agent to make all efforts to restart index calculation.
- MVIS prompts Dissemination agent to make all efforts to restart index dissemination.
- MVIS recalculates missing EOD data points and disseminates to vendors and clients.
- Legal and Compliance to check the relevant agreements for liability of the calculation/dissemination agent.
- If MVIS identifies any conduct that may involve manipulation or attempted manipulation of an index by calculation/dissemination agent it will report this to BaFin.
- Where possible and economically reasonable MVIS will try use another calculation and/or dissemination agent.

6 APPENDIX

6 Appendix

6.1 Changes to the Index Guide

This table contains all changes to the index guide after 1 January 2018, when the European Benchmark Regulation became effective.

Date	IG Version	Change
06 May 2020	1.1	Index renamed to 21Shares Sygnum Platform Winners Index
17 August 2020	1.2	Index renamed to Sygnum Platform Winners Index, clarification of CCCAGG pricing

7 DISCLAIMER

7 Disclaimer

MVIS has contracted with CryptoCompare Data Limited to maintain and calculate the Index. CryptoCompare Data Limited uses its best efforts to ensure that the Index is calculated correctly subject to the accuracy of any data that has been provided to it by third parties. Irrespective of its obligations towards MV Index Solutions GmbH, CryptoCompare Data Limited has no obligation to point out errors in the Index to third parties. In particular, MVIS is not responsible for the Licensee and/or for Licensee's legality or suitability and/or for Licensee's business offerings. Offerings by Licensee are not sponsored, endorsed, sold, or promoted by MVIS, Van Eck Associates Corporation as its parent company or its affiliates (collectively, "VanEck"), and MVIS and VanEck make no representation regarding the advisability of investing in Licensee and/or in Licensee's business offerings. MVIS, VanEck AND ITS AFFILIATES MAKE NO WARRANTIES AND BEAR NO LIABILITY WITH RESPECT TO LICENSEE.