

MSCI Global Digital Assets Smart Contract Index Methodology

November 2022

Contents	1	Introduction	3
	2	Constructing the MSCI Global Digital Assets Smart Contract Index	4
	2.1	Applicable Universe	4
	2.2	Eligible Universe	4
	2.3	Final Universe	5
	2.4	Index Weighting Scheme	5
	2.5	Index Calculation	5
	3	Maintaining the MSCI Global Digital Assets Smart Contract Index	6
	3.1	Quarterly Index Reviews	6
	3.2	Ongoing Event-Related Maintenance	6
		Appendix 1 – Digital Assets Terminology	7

1 Introduction

The MSCI Global Digital Assets Smart Contract Index (“the Index”) aims to represent the performance of a digital assets investment strategy that focuses on digital assets that are associated with technology platforms supporting “Smart Contracts” features. A Smart Contract is a digital program that runs on a blockchain; moreover, it is a collection of programs and data that resides at a specific address on the underlying blockchain. Digital assets that support Smart Contracts functionality are capable of being used by a wide range of decentralized applications across industries.

The Index is constructed by selecting and weighting underlying Indexes that represent individual digital assets.

2 Constructing the MSCI Global Digital Assets Smart Contract Index

2.1 Applicable Universe

All¹ individual digital assets benchmarks (herein, “Crypto Reference Indexes”) published by Compass Financial Technologies² (herein, “Component Index Administrator”).

2.2 Eligible Universe

2.2.1 Datonomy™ Selection

Crypto Reference Indexes representing digital assets classified in the Blockchain Infrastructure class as per the datonomy³ are eligible for inclusion in the Index.

2.2.2 Smart Contracts Selection

Crypto Reference Indexes from 2.2.1 that are classified in the Smart Contracts category are eligible for inclusion in the Index.

Digital assets are classified⁴ in the Smart Contracts category if,

- The blockchain network to which the asset belongs supports Smart Contracts and offers the functionality capable of building decentralized applications
- The network ecosystem of the digital asset (including the main chain and any side chains or parachains) supports Smart Contracts and offers the functionality capable of building decentralized applications
- The digital asset exists on top of a non-native network and allows for the execution of Smart Contracts

2.2.3 Exclusions

¹ Crypto Reference Indexes published by Compass Financial Technologies at least 60 days prior to the Index Review date. Refer to “Compass Crypto Reference Indices - Codes - Rounding” section for a detailed list of available Indexes.

Indexes do not incorporate the value of staking rewards in the calculation. Refer to “Indices Calculation” section for further details, at https://www.compassft.com/wp-content/uploads/CCBI_Methodology.pdf

² Refer to Compass Crypto Reference Indexes methodology for details on the index construction, at https://www.compassft.com/wp-content/uploads/CCRI_Methodology.pdf

³ For more details refer to <https://www.msci.com/documents/1296102/33887102/Datonomy+Methodology.pdf>

⁴ Data provided by CryptoCompare (<https://data.cryptocompare.com/>)

Crypto Reference Indexes from the Applicable Universe satisfying following criteria are not eligible for selection in the Index,

- Indexes representing digital assets identified as Stable coins/Pegged coins/Privacy coins
- Indexes representing digital assets placed in the bottom 5% of the Applicable Universe when ranked in the descending order of volume⁵ in US Dollar at the time of rebalance.

2.3 Final Universe

At each Quarterly Index Review, digital assets corresponding to Crypto Reference Indexes in the Eligible Universe are ranked in the descending order of their full market capitalization⁶ and the top 10 digital assets are identified. Crypto Reference Indexes representing these 10 digital assets are included in the Final Universe. If the Eligible Universe consists of fewer than 10 Crypto Reference Indexes, all constituents of the Eligible Universe are included in the Final Universe.

2.4 Index Weighting Scheme

The Crypto Reference Indexes included in the Final Universe (herein, “Component Indexes”) are assigned weights in proportion of the full market capitalization of their corresponding digital assets. The maximum weight to a Component Index will be capped at 30% at each Index Review.

2.5 Index Calculation

The Index daily price returns are calculated as weighted-average daily price returns in US Dollar (USD) of the Component Indexes. The latest available daily index returns of the Component Indexes will be used for calculation of the returns of the Index. The Index is available in price variant calculated as per the MSCI Index Calculation Methodology⁷.

⁵ Amount in US Dollar of a digital asset traded over the course of a day for a set of exchanges as defined by CryptoCompare (<https://data.cryptocompare.com/>)

⁶ Calculated as the product of the price of the digital asset, represented by the corresponding Crypto Reference Index level, and Circulating Supply. Prices as of the previous day and Circulating Supply as of end of previous month prior to the rebalancing date are used for the calculation.

⁷ MSCI Index Calculation Methodology available at <https://www.msci.com/index-methodology>

3 Maintaining the MSCI Global Digital Assets Smart Contract Index

3.1 Quarterly Index Reviews

The MSCI Index follows a quarterly rebalance schedule, effective as of the first business day of March, June, September, and December.

The weights of Component Indexes constituting Index will be announced five business days prior to the effective date of each Quarterly Index Review (QIR). In between the quarterly reviews, the weights of the Component Indexes in the Index will evolve based on the relative daily return performance in USD of the Component Indexes.

3.2 Ongoing Event-Related Maintenance

There will be no addition to the Component Indexes between two successive Index Reviews. If any Component Index is terminated⁸ by the Component Index Administrator, it will be deleted from the Index on the day of termination with an advance notification of two days.

⁸ Please refer to Compass Crypto Reference Indexes methodology (specifically, "Index Calculation" and "Methodology Changes - Maintenance" sections) for details on component index termination, at https://www.compassft.com/wp-content/uploads/CCRI_Methodology.pdf

Appendix 1 – Digital Assets Terminology

- **Circulating Supply:** Quantity of a digital asset that is publicly available for trading and circulating on the market.
- **Full Market Capitalization:** Calculated as the product of the price of the digital asset, represented by the product of the corresponding Crypto Reference Index level and Circulating Supply.
- **Pegged Coins:** Digital assets that are linked to the specific value of an asset or commodity, not necessarily a stable reserve one, as is the case for Stable Coins (see definition below).
- **Privacy Coins:** Digital assets that preserve anonymity by obscuring the flow of money across their networks.
- **Smart Contracts:** Digital program that runs on a blockchain; moreover, it is a collection of programs and data that resides at a specific address on the underlying blockchain.
- **Stable Coins:** Digital asset that is pegged to a stable reserve asset like the U.S. dollar. Are designed to reduce volatility relative to unpegged digital assets.

Methodology Book Tracked Changes

First version reviewed and published in July 2022.

The following modifications are effective from November 2022.

Section 2.1 – Applicable Universe

- Clarification regarding the treatment of staking rewards added as footnote

Section 2.2 – Eligible Universe

- Section has been updated to reflect the incorporation of datonomy in the selection process

Contact us

clientservice@msci.com

AMERICAS

Americas	1 888 588 4567 *
Atlanta	+ 1 404 551 3212
Boston	+ 1 617 532 0920
Chicago	+ 1 312 675 0545
Monterrey	+ 52 81 1253 4020
New York	+ 1 212 804 3901
San Francisco	+ 1 415 836 8800
São Paulo	+ 55 11 3706 1360
Toronto	+ 1 416 628 1007

EUROPE, MIDDLE EAST & AFRICA

Cape Town	+ 27 21 673 0100
Frankfurt	+ 49 69 133 859 00
Geneva	+ 41 22 817 9777
London	+ 44 20 7618 2222
Milan	+ 39 02 5849 0415
Paris	0800 91 59 17 *

ASIA PACIFIC

China North	10800 852 1032 *
China South	10800 152 1032 *
Hong Kong	+ 852 2844 9333
Mumbai	+ 91 22 6784 9160
Seoul	00798 8521 3392 *
Singapore	800 852 3749 *
Sydney	+ 61 2 9033 9333
Taipei	008 0112 7513 *
Thailand	0018 0015 6207 7181 *
Tokyo	+ 81 3 5290 1555

* = toll free

About MSCI

MSCI is a leading provider of critical decision support tools and services for the global investment community. With over 50 years of expertise in research, data and technology, we power better investment decisions by enabling clients to understand and analyze key drivers of risk and return and confidently build more effective portfolios. We create industry-leading research-enhanced solutions that clients use to gain insight into and improve transparency across the investment process.

To learn more, please visit

www.msci.com.

The process for submitting a formal index complaint can be found on the index regulation page of MSCI's website at: <https://www.msci.com/index-regulation>.

Notice and disclaimer

This document and all of the information contained in it, including without limitation all text, data, graphs, charts (collectively, the "Information") is the property of MSCI Inc. or its subsidiaries (collectively, "MSCI"), or MSCI's licensors, direct or indirect suppliers or any third party involved in making or compiling any Information (collectively, with MSCI, the "Information Providers") and is provided for informational purposes only. The Information may not be modified, reverse-engineered, reproduced or disseminated in whole or in part without prior written permission from MSCI. All rights in the Information are reserved by MSCI and/or its Information Providers. The Information may not be used to create derivative works or to verify or correct other data or information. For example (but without limitation), the Information may not be used to create indexes, databases, risk models, analytics, software, or in connection with the issuing, offering, sponsoring, managing or marketing of any securities, portfolios, financial products or other investment vehicles utilizing or based on, linked to, tracking or otherwise derived from the Information or any other MSCI data, information, products or services. The user of the Information assumes the entire risk of any use it may make or permit to be made of the Information. NONE OF THE INFORMATION PROVIDERS MAKES ANY EXPRESS OR IMPLIED WARRANTIES OR REPRESENTATIONS WITH RESPECT TO THE INFORMATION (OR THE RESULTS TO BE OBTAINED BY THE USE THEREOF), AND TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, EACH INFORMATION PROVIDER EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES (INCLUDING, WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF ORIGINALITY, ACCURACY, TIMELINESS, NON-INFRINGEMENT, COMPLETENESS, MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) WITH RESPECT TO ANY OF THE INFORMATION. Without limiting any of the foregoing and to the maximum extent permitted by applicable law, in no event shall any Information Provider have any liability regarding any of the Information for any direct, indirect, special, punitive, consequential (including lost profits) or any other damages even if notified of the possibility of such damages. The foregoing shall not exclude or limit any liability that may not by applicable law be excluded or limited, including without limitation (as applicable), any liability for death or personal injury to the extent that such injury results from the negligence or willful default of itself, its servants, agents or sub-contractors. Information containing any historical information, data or analysis should not be taken as an indication or guarantee of any future performance, analysis, forecast or prediction. Past performance does not guarantee future results. The Information should not be relied on and is not a substitute for the skill, judgment and experience of the user, its management, employees, advisors and/or clients when making investment and other business decisions. All Information is impersonal and not tailored to the needs of any person, entity or group of persons. None of the Information constitutes an offer to sell (or a solicitation of an offer to buy), any security, financial product or other investment vehicle or any trading strategy.

It is not possible to invest directly in an index. Exposure to an asset class or trading strategy or other category represented by an index is only available through third party investable instruments (if any) based on that index. MSCI does not issue, sponsor, endorse, market, offer, review or otherwise express any opinion regarding any fund, ETF, derivative or other security, investment, financial product or trading strategy that is based on, linked to or seeks to provide an investment return related to the performance of any MSCI index (collectively, "Index Linked Investments"). MSCI makes no assurance that any Index Linked Investments will accurately track index performance or provide positive investment returns. MSCI Inc. is not an investment adviser or fiduciary and MSCI makes no representation regarding the advisability of investing in any Index Linked Investments. Index returns do not represent the results of actual trading of investible assets/securities. MSCI maintains and calculates indexes, but does not manage actual assets. Index returns do not reflect payment of any sales charges or fees an investor may pay to purchase the securities underlying the index or Index Linked Investments. The imposition of these fees and charges would cause the performance of an Index Linked Investment to be different than the MSCI index performance. The Information may contain back tested data. Back-tested performance is not actual performance, but is hypothetical. There are frequently material differences between back tested performance results and actual results subsequently achieved by any investment strategy. Constituents of MSCI equity indexes are listed companies, which are included in or excluded from the indexes according to the application of the relevant index methodologies. Accordingly, constituents in MSCI equity indexes may include MSCI Inc., clients of MSCI or suppliers to MSCI. Inclusion of a security within an MSCI index is not a recommendation by MSCI to buy, sell, or hold such security, nor is it considered to be investment advice. Data and information produced by various affiliates of MSCI Inc., including MSCI ESG Research LLC and Barra LLC, may be used in calculating certain MSCI indexes. More information can be found in the relevant index methodologies on www.msci.com.

MSCI receives compensation in connection with licensing its indexes to third parties. MSCI Inc.'s revenue includes fees based on assets in Index Linked Investments. Information can be found in MSCI Inc.'s company filings on the Investor Relations section of www.msci.com. MSCI ESG Research LLC is a Registered Investment Adviser under the Investment Advisers Act of 1940 and a subsidiary of MSCI Inc. Except with respect to any applicable products or services from MSCI ESG Research, neither MSCI nor any of its products or services recommends, endorses, approves or otherwise expresses any opinion regarding any issuer, securities, financial products or instruments or trading strategies and MSCI's products or services are not intended to constitute investment advice or a recommendation to make (or refrain from making) any kind of investment decision and may not be relied on as such. Issuers mentioned or included in any MSCI ESG Research materials may include MSCI Inc., clients of MSCI or suppliers to MSCI, and may also purchase research or other products or services from MSCI ESG Research. MSCI ESG Research materials, including materials utilized in any MSCI ESG Indexes or other products, have not been submitted to, nor received approval from, the United States Securities and Exchange Commission or any other regulatory body. Any use of or access to products, services or information of MSCI requires a license from MSCI. MSCI, Barra, RiskMetrics, IPD and other MSCI brands and product names are the trademarks, service marks, or registered trademarks of MSCI or its subsidiaries in the United States and other jurisdictions. The Global Industry Classification Standard (GICS) was developed by and is the exclusive property of MSCI and Standard & Poor's. "Global Industry Classification Standard (GICS)" is a service mark of MSCI and Standard & Poor's. MIFID2/MIFIR notice: MSCI ESG Research LLC does not distribute or act as an intermediary for financial instruments or structured deposits, nor does it deal on its own account, provide execution services for others or manage client accounts. No MSCI ESG Research product or service supports, promotes or is intended to support or promote any such activity. MSCI ESG Research is an independent provider of ESG data, reports and ratings based on published methodologies and available to clients on a subscription basis. We do not provide custom or one-off ratings or recommendations of securities or other financial instruments upon request.

Privacy notice: For information about how MSCI collects and uses personal data, please refer to our Privacy Notice at <https://www.msci.com/privacy-pledge>.