

DDA Bitcoin Macro Allocation Index

Benchmark Statement

December 5^{th} , 2023

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1 General Information

Index Family Name : DDA Bitcoin Macro Allocation Index

Initial Date of Publication : December 11th, 2023

Index Owner : Deutsche Digital Assets

Index Administrator : Compass Financial Technologies (France)

Index Calculation Agent : Compass Financial Technologies (France)

Allocation Provider : Deutsche Digital Assets

2 Index Description Objective

The DDA Bitcoin Macro Allocation (the *Index*) is a strategy index invested in the Compass Crypto Reference Index Bitcoin according to a quantitative model developed and maintained by the Allocation Provider.

The strategy calculates an investment signal for each of the four biggest macroeconomic factors, by extracting a momentum score from the assets most sensitive to each factor. A final signal is then composed by modulating each sub-signal by the explanatory power of each factor on the Bitcoin price movement over a 6-month rolling window.

The Index can be accessed online on the Compass Financial Technologies website (www.compass-ft.com) or on Bloomberg or Refinitiv.

The Index is owned by Deutsche Digital Assets. The Index Administrator and Calculation Agent is Compass Financial Technologies (France).

DDA Bitcoin Macro Allocation Index					
Compass API Code	Index Name	Bloomberg Code	Refinitiv Code		
DDAMACRO	DDA Bitcoin Macro Allocation Index	DDAMACRO Index	.DDAMACRO		

Table 1: DDA Bitcoin Macro Allocation Index - Publication Codes

3 Regulatory Information

The DDA Bitcoin Macro Allocation Index is non-significant benchmarks according to EU Regulation 2016/1011 given:

- 1. they are not used directly or indirectly within a combination of benchmarks as a reference for financial instruments or financial contracts or for measuring the performance of investments funds having a total average value of at least EUR 50 billion on the basis of all the range of maturities or tenors of the benchmark, where applicable, over a period of six months; and
- 2. they have market-led substitutes and, in the event that the benchmarks cease to be provided or are provided on the basis of input data no longer fully representative of the underlying market or economic reality or unreliable input data, the benchmark administrator do not anticipate a significant and adverse impact on market integrity, financial stability, consumers, the real economy or the financing of households or businesses in the EU.
- 3. The DDA Bitcoin Macro Allocation Index is based on signals provided by the external service provider Deutsche Digital Assets (the "Allocation Provider") in accordance with the Article 10 of the EU Regulation 2016/1011. Compass Financial Technologies (France) has take all the necessary actions to make sure sure that the conditions described in section 10.3 of the EU Regulation 2016/2011 are fulfilled.

4 Index Methodology

4.1 Index allocation and composition

The Index invests in one single Underlying Component based on signals and exposures provided by the Allocation Provider. The allocation can be revised 1 time per day, until 2pm London time. Each new allocation is provided by the Allocation Provider via an Allocation Notice. Once received and validated by the Index Calculation Agent, the Allocation Notice will be implemented, based on the time it is received by the Index Calculation Agent and based on the specific cut off times defined by the Index Calculation Agent.

4.2 Underlying Components

The Underlying Component of the Index is the Compass Crypto Reference Index Bitcoin.

Underlying Component	Bloomberg Code	Refinitiv Code	Currency
Compass Crypto Reference Index Bitcoin	CCRIBTC Index	.CCRIBTC	USD

Table 2: DDA Bitcoin Macro Allocation - Underlying Component

4.3 Allocation model

From the daily closes of 30 assets from a variety of asset classes, including equities, corporate credit, sovereign bonds, foreign exchange, and commodities, the first four primary components are extracted and will be referred to as macro factors. Next, the partial R2 of the macro factors in relation to the Bitcoin price movement are calculated on a rolling 6-month period

For more information please read the dedicated research report https://deutschedigitalassets.com/ insights/news/cryptoassets-and-the-macroeconomy-can-macro-factors-explain-the-price-of-bitcoin/.

Next, for each factor, the most sensitive assets are identified, and for each of these assets, a 6 month momentum score is calculated, as well as the percentile of this score over a rolling 4-year period. If the momentum score is among the worst scores in case of positive correlation with Bitcoin or among the best scores in case of negative correlation with Bitcoin, the asset is assigned a contribution of 0.

The signal per factor is the average of the signals assigned to each chosen asset. The score of each factor is then modulated by the rolling partial R2 of the factor in relation to Bitcoin price movement, assigning 1

to the part that is not explained by the 4 factors (residuals). Finally the sum of the 5 components gives a score between 0 and 1 determining the allocation of the model to Bitcoin and the residual into US-Dollar.

In order to smooth the series, a ten-days moving average is applied on the final signal, the signal is forced to 1 if the final value is above 0.67, and daily variations of the signal are capped at 10%.

5 Amendment to the Index methodology

The Index methodology may be supplemented, amended in whole or in part, revised or withdrawn at any time. Supplements, amendments, revisions and withdrawals may also lead to changes in the way the Index is compiled or calculated or affect the Index in another way. In the absence of exceptional circumstances affecting the Index calculation or methodology, the Index is reviewed annually. Changes in Index methodology decided during the annual review will be published on the Compass website (www.compass-ft.com).

The Index Administrator shall inform Index licensees of any amendment to the Index methodology with reasonable prior notice. The notification document shall provide Index licensees with the amendments, the reasons for making such amendment and the effective date of the changes.

6 Cessation of the Index

The Index Administrator has established procedures to be followed for termination of the Index. Any termination of the Index must be approved in advance by the Index Committee. A notice to licensees will be published in advance of the termination. Before disactivating the Index, the Index Administrator always determines whether there are any listed financial products issued on that index as the underlying. The Index Administrator terminates indices only provided that:

- All existing commercial customers have been consulted, and commercial relationships have been terminated or transitioned accordingly.
- Consultations with stakeholders have not led to the decision to continue the index.

The Index Administrator is not responsible for determining or offering an alternative index to its subscribers or other stakeholders when the Index is terminated. However, the Index Administrator may recommend an alternative index if it considers, based on various criteria, that this alternative index could be a credible substitute index.

7 Disclaimer

Nothing contained herein shall constitute or shall be deemed to constitute a financial, legal, tax or other advice of any kind, or a solicitation to purchase, sell or invest in any financial products or to engage in any financial strategy. Compass Financial Technologies SA or any of its affiliates ("Compass") (i) does not guarantee the adequacy, the accuracy, the timeliness, the completeness, the evolution and/or the movements of its indices or any data included therein (the "Indices" or the "Index"), (ii) shall not have any liability for any errors, omissions, delays or interruptions therein and (iii) makes no warranty, express or implied, as to results to be obtained by owners of any securities, or by any other person or entity from the use of the Indices. Compass does not make any express or implied warranties, and expressly disclaims, all warranties of merchantability or fitness for a particular purpose or use with respect to the Indices. Without limiting any of the foregoing, in no event shall Compass have any liability for any lost profits or indirect, punitive, special or consequential damages or losses, even if notified of the possibility thereof.



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