

FTSE Digital Asset Bitcoin Ethereum Index

In association with Digital Asset Research
v1.0



**FTSE
RUSSELL**

An LSEG Business

Contents

Section 1 Introduction	3
Section 2 Management responsibilities	4
Section 3 FTSE Russell index policies	5
Section 4 Digital asset eligibility	7
Section 5 Periodic review of constituents	8
Section 7 Digital asset actions and network events	9
Section 8 Index calculation method	10
Appendix A Further information	11

Section 1

Introduction

1. Introduction

- 1.1 This document sets out the Ground Rules for the FTSE Digital Asset Bitcoin Ethereum Index. The FTSE Digital Asset Bitcoin Ethereum Index measures the performance of Bitcoin and Ethereum by circulating weight. The index is constructed to provide coverage of these two fixed digital assets and is a subset of the FTSE Global Digital Asset Index Series. The constituents are circulating supply weighted.
- 1.2 These rules should be read in conjunction with FTSE Global Digital Asset Index Series Ground Rules, Guide to the Vetting of Digital Assets and Digital Asset Exchanges and the Guide to the Calculation of the FTSE DAR Digital Asset Prices. Copies of these documents are available at www.lseg.com/en/ftse-russell/.
- 1.2.1 A digital asset is a cryptographically secured digital instrument for which the issuance, transfer and ownership is recorded on a data structure commonly referred to as a blockchain.
- 1.2.2 The FTSE Digital Asset Bitcoin Ethereum Index is designed to provide market participants a mechanism to evaluate digital asset investments and prices.
- 1.3 The FTSE Digital Asset Bitcoin Ethereum Index does not take account of ESG factors in its index design.
- 1.4 The base currency of the FTSE Digital Asset Bitcoin Ethereum Index is US Dollars (USD).
- 1.5 Indices are calculated at price return levels only.
- 1.6 FTSE Russell**
 - 1.6.1 FTSE Russell is a trading name of FTSE International Limited, Frank Russell Company, FTSE Global Debt Capital Markets Limited (and its subsidiaries FTSE Global Debt Capital Markets Inc. and FTSE Fixed Income Europe Limited), FTSE Fixed Income LLC, FTSE (Beijing) Consulting Limited, Refinitiv Benchmark Services (UK) Limited, Refinitiv Limited and Beyond Ratings.
 - 1.6.2 FTSE Russell does not make any representation or warranty, express or implied, as to the accuracy, completeness or correctness of the FTSE Digital Asset Bitcoin Ethereum Index.
 - 1.6.3 No liability whether as a result of negligence or otherwise is accepted by FTSE Russell (or any person concerned with the preparation or publication of these Ground Rules) for any losses, damages, claims and expenses suffered by any person as a result of:
 - any reliance on these Ground Rules;
 - any inaccuracies in these Ground Rules;
 - any non-application or misapplication of the policies or procedures described in these Ground Rules; and/or
 - any inaccuracies in the compilation of the index series or any constituent data.

Section 2

Management responsibilities

2. Management responsibilities

2.1 FTSE International Limited (FTSE)¹

2.1.1 FTSE is the benchmark administrator of the index series.

2.1.2 FTSE is responsible for the daily calculation, production and operation of the index series, and will:

- maintain records of the index weightings of all constituents;
- make changes to the constituents and their weightings in accordance with the Ground Rules;
- carry out periodic index reviews of the index series and apply the changes resulting from the reviews as required by the Ground Rules;
- publish changes to the constituent weightings resulting from their ongoing maintenance and the periodic reviews; and
- disseminate the indices.

2.2 Digital Asset Research

2.2.1 Digital Asset Research (DAR) assesses the quality of pricing data, qualifies pricing sources, calculates the FTSE DAR Digital Asset Prices and supplies FTSE Russell with price feeds and advises on the eligibility of assets in the FTSE Digital Asset Bitcoin Ethereum Index.

2.2.2 DAR is an independent, privately owned research firm and data provider, which partners with FTSE Russell in research into and providing data on digital assets.

2.2.3 DAR is responsible for the ongoing vetting of digital assets and of the broker dealer/exchanges of digital assets. DAR collects and validates the data it obtains as principal to identify ensuring both digital assets and broker dealer/exchanges of digital assets pass a strict set of rules.

2.3 Amendments to these Ground Rules

2.3.1 These Ground Rules shall be subject to regular review (at least once a year) by FTSE Russell to ensure that they continue to best reflect the aims of the index series. The feedback from these consultations will be considered by the FTSE Russell Index Governance Board before approval is granted.

¹ The term administrator is used in this document in the same sense as it is defined in [Regulation \(EU\) 2016/1011 of the European Parliament and of the Council of 8 June 2016 on indices used as benchmarks in financial instruments and financial contracts or to measure the performance of investment funds](#) (the European Benchmark Regulation) and [The Benchmarks \(Amendment and Transitional Provision\) \(EU Exit\) Regulations 2019](#) (the UK Benchmark Regulation).

Section 3

FTSE Russell index policies

3. FTSE Russell index policies

These Ground Rules should be read in conjunction with the following policy documents, which can be accessed using the links below:

3.1 Guide to the Vetting of Digital Assets and Digital Asset Exchanges

3.1.1 This document sets out the criteria for the vetting of digital assets and digital asset exchanges used in the calculation of the FTSE DAR Digital Asset Prices and the FTSE DAR Reference Prices:

[Guide to the Vetting of Digital Assets and Digital Asset Exchanges](#)

3.2 Guide to the Calculation of the FTSE DAR Digital Asset Prices and FTSE DAR Reference Prices

3.2.1 This document sets out the methodology for the calculation of the FTSE DAR Digital Asset Prices and the FTSE DAR Reference Prices:

[Guide to the Calculation of FTSE DAR Digital Asset Prices and Reference Prices Fixes.pdf](#)

3.3 Guide to Calculation Method for the Median Liquidity Test

3.3.1 This guide describes how the liquidity test is conducted to assist users in their ability to replicate the liquidity test.

[FTSE Global Digital Asset Index Series Guide to Calculation Method for the Liquidity Test.pdf](#)

3.4 Network Events Guide for FTSE Digital Assets Indices

3.4.1 This document sets out guidance for the treatment of network events and assumes the reader is already familiar with the basic concept of index calculation and treatment of digital price adjustments caused by such developments:

[Digital Actions and Network Events Guide.pdf](#)

3.5 Participating and watch list exchanges

[Digital assets participating watchlist exchanges](#)

3.6 Queries and Complaints

FTSE Russell's complaints procedure can be accessed using the following link:

[Benchmark Determination Complaints Handling Policy.pdf](#)

3.7 Recalculation Policy and Guidelines

3.7.1 This policy and the FTSE Russell Digital Assets Index Recalculation Guidelines below apply only to those digital assets indices where the relevant index Ground Rules and other methodology documents indicate that this policy and the guidelines apply:

[Digital Asset Index Recalculation Policy and Guidelines.pdf](#)

3.8 Policy for Benchmark Methodology Changes

Details of FTSE Russell's policy for making benchmark methodology changes can be accessed using the following link:

[Policy for Benchmark Methodology Changes.pdf](#)

3.9 Real Time Status Definitions

3.9.1 Please refer to the following guide for details of real time status definitions for indices that are calculated in real time.

[Real Time Status Definitions.pdf](#)

Section 4

Digital asset eligibility

4. Digital asset eligibility

4.1 Eligibility requirements

4.1.1 The index comprises of two fixed digital assets – Bitcoin and Ethereum.

Section 5

Periodic review of constituents

5. Periodic review of constituents

5.1 Eligible digital assets

- 5.1.1 Only Bitcoin and Ethereum digital assets are eligible for the FTSE Digital Asset Bitcoin Ethereum Index. [Guide to the Vetting of Digital Assets and Digital Asset Exchanges.pdf](#)

5.2 FTSE DAR Reference Price

- 5.2.1 The price of each digital asset in a FTSE Digital Asset Bitcoin Ethereum Index is the FTSE DAR Reference Price – benchmark asset fixes.

Details of the FTSE DAR Reference prices are provided in the document – [Guide to the Calculation of the FTSE DAR Digital Asset Prices and FTSE DAR Reference Prices.](#)

5.3 Index reviews

- 5.3.1 The FTSE Digital Asset Bitcoin Ethereum Index is reviewed on a quarterly basis in March, June, September and December (the review month) using circulating supply as at the close of the last day of the month prior to the review month (the data cut-off date) and price as at the close of Wednesday after the first Friday of the review month. The review will be implemented on the third Friday, after close of the review month. Prior to March 2022, the indices were reviewed on a quarterly basis in January, April, July and October (the review month) using market information as at the close of the last day of the month prior to the review month (the data cut-off date). The reviews were implemented at 22:00 UTC on the Sunday following the second Friday in the month following the month of the data cut-off date.

Section 7

Digital asset actions and network events

6. Digital asset actions and network events

- 6.1.1 Full details of changes to constituent digital assets at the quarterly review due to events can be accessed in the Digital Actions and Network Events Guide using the following link:

[Digital Actions and Network Events Guide](#)

Section 8

Index calculation method

7. Index calculation method

7.1 Prices

7.1.1 FTSE calculates the FTSE DAR Reference Price for each digital asset using the method outlined in the document Guide to the Calculation of FTSE DAR Digital Asset Prices and FTSE DAR Reference Prices.

7.2 Calculation frequency

7.2.1 The FTSE DAR Reference Price is calculated every hour and the 22:00 UTC fix is used for the calculation of the FTSE Digital Asset Bitcoin Ethereum Index and associated products.

7.3 Index calculation

7.3.1 The FTSE Digital Asset Bitcoin Ethereum Index calculation formula is described below:

$$\sum_{i=1}^N \frac{(p_i(t) \times e_i(t) \times s_i(t) \times f_i(t))}{d}$$

where:

- $i = 1, 2, \dots, N$ – digital assets.
- N is the number of digital assets in the index.
- t is the calculation time.
- $p_i(t)$ is the FTSE DAR reference price of the digital asset i at calculation time t .
- $e_i(t)$ is the exchange rate required to convert the digital asset i price into the index's base currency at calculation time t .
- $s_i(t)$ is the circulations supply used by FTSE Russell for the digital asset, as defined in these Ground Rules at calculation time t .
- $f_i(t)$ is the investibility weighting factor to be applied to a digital asset i at calculation time t to allow amendments to its weighting, expressed as a number between 0 and 1, where 1 represents a 100% free float. Free float is computed as $f_i(t) = \frac{(s_i(t) - \text{staked digital assets}_i(t))}{s_i(t)}$.
- d is the divisor, a figure that represents the total capital of the index at the base date base hour. The divisor can be adjusted to allow changes to digital assets to be made without distorting the index in the FTSE Digital Asset Index Series.

7.4 Index opening and closing hours

7.4.1 The FTSE Digital Asset Bitcoin Ethereum Index is calculated Sunday to Friday at 22:00 UTC.

Appendix A

Further information

A Glossary of Terms used in FTSE Russell's Ground Rule documents can be found using the following link:

[Glossary – Digital Assets.pdf \(ftserussell.com\)](#)

Further information on the FTSE Digital Asset Bitcoin Ethereum Index is available from FTSE Russell.

For contact details, please visit the FTSE Russell website or contact FTSE Russell client services at info@ftserussell.com.

Website: www.lseg.com/en/ftse-russell/

Disclaimer

© 2024 London Stock Exchange Group plc and its applicable group undertakings ("LSEG"). LSEG includes (1) FTSE International Limited ("FTSE"), (2) Frank Russell Company ("Russell"), (3) FTSE Global Debt Capital Markets Inc. and FTSE Global Debt Capital Markets Limited (together, "FTSE Canada"), (4) FTSE Fixed Income Europe Limited ("FTSE FI Europe"), (5) FTSE Fixed Income LLC ("FTSE FI"), (6) FTSE (Beijing) Consulting Limited ("WOFE"), (7) Refinitiv Benchmark Services (UK) Limited ("RBSL"), (8) Refinitiv Limited ("RL") and (9) Beyond Ratings S.A.S. ("BR"). All rights reserved.

The FTSE Digital Asset Bitcoin Ethereum Index is calculated by or on behalf of FTSE International Limited or its affiliate, agent or partner. FTSE International Limited is authorised and regulated by the Financial Conduct Authority as a benchmark administrator. Refinitiv Benchmark Services (UK) Limited is authorised and regulated by the Financial Conduct Authority as a benchmark administrator.

FTSE Russell® is a trading name of FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, WOFE, RBSL, RL and BR. "FTSE®", "Russell®", "FTSE Russell®", "FTSE4Good®", "ICB®", "WMR™", "FR™", "Beyond Ratings®" and all other trademarks and service marks used herein (whether registered or unregistered) are trade marks and/or service marks owned or licensed by the applicable member of LSEG or their respective licensors and are owned, or used under licence, by FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, WOFE, RBSL, RL or BR.

All information is provided for information purposes only. All information and data contained in this publication is obtained by LSEG, from sources believed by it to be accurate and reliable. Because of the possibility of human and mechanical inaccuracy as well as other factors, however, such information and data is provided "as is" without warranty of any kind. No member of LSEG nor their respective directors, officers, employees, partners or licensors make any claim, prediction, warranty or representation whatsoever, expressly or impliedly, either as to the accuracy, timeliness, completeness, merchantability of any information or LSEG Products, or of results to be obtained from the use of LSEG products, including but not limited to indices, rates, data and analytics, or the fitness or suitability of the LSEG products for any particular purpose to which they might be put. The user of the information assumes the entire risk of any use it may make or permit to be made of the information.

No responsibility or liability can be accepted by any member of LSEG nor their respective directors, officers, employees, partners or licensors for (a) any loss or damage in whole or in part caused by, resulting from, or relating to any inaccuracy (negligent or otherwise) or other circumstance involved in procuring, collecting, compiling, interpreting, analysing, editing, transcribing, transmitting, communicating or delivering any such information or data or from use of this document or links to this document or (b) any direct, indirect, special, consequential or incidental damages whatsoever, even if any member of LSEG is advised in advance of the possibility of such damages, resulting from the use of, or inability to use, such information.

No member of LSEG nor their respective directors, officers, employees, partners or licensors provide investment advice and nothing in this document should be taken as constituting financial or investment advice. No member of LSEG nor their respective directors, officers, employees, partners, or licensors make any representation regarding the advisability of investing in any asset or whether such investment creates any legal or compliance risks for the investor. A decision to invest in any such asset should not be made in reliance on any information herein. Indices and rates cannot be invested in directly. Inclusion of an asset in an index or rate is not a recommendation to buy, sell or hold that asset nor confirmation that any particular investor may lawfully buy, sell or hold the asset or an index or rate containing the asset. The general information contained in this publication should not be acted upon without obtaining specific legal, tax, and investment advice from a licensed professional.

No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the applicable member of LSEG. Use and distribution of LSEG data requires a licence from LSEG and/or its licensors.



**FTSE
RUSSELL**
An LSEG Business