BP Platform Index Methodology

BitUP

June, 2018

1 Preface

BPP consists of 9 constituent assets with large circulating market capitalization and liquidity from the entire universe of platform digital assets. Launched on June, 2018, the index aims to measure the performance of the platform digital asset market.

2 Index Universe

The index universe of BPP includes top 500 platform digital assets ranked by average daily circulating market capitalization of the most recent month in descending order.

3 Constituents Selection

Index constituents are selected by BitUP Index Advisory Committee according to the average daily trading value and average daily circulating market capitalization during the most recent month for digital assets in the index universe. Index constituents are reviewed every quarter (01/04/07/10-01 00:00:00 UTC).

4 Index Calculation

The unit of BPP index is "point", and the index level is rounded to 3 decimal places.

4.1 Base Date and Base Level

The base date is June 1, 2018. The base level is 1000.

4.2 Circulating Supply

To reflect the price fluctuation in the digital asset market, BPP adopts circulating supply to calculate index. Circulating supply is the best approximation of the number of coins that are circulating in the market and are available for trading, which is capable of reflecting real investment opportunities. Hence, BPP adopts circulating supply weighted method to calculate index.

4.3 Category Weighted Method

BPP uses category weighted method to adjust constituents' index weights. Namely, BitUP Index Advisory Committee will grant certain inclusion factors to the index weights according to the average daily trading value and average daily circulating market capitalization during the most recent month for constituent assets to insure index stability.

4.4 Symbol Definition

i: Constituent assets

t: Time

$C_{i(t)}$: Category of constituent i at time t

$P_{i(t)}$: Price of constituent i at time t

$S_{i(t)}$: Circulating supply of constituent i at time t

$I_{(t)}$: Index level at time t

4.5 Index Calculation Formula

$$I_{(t)} = \sum(C_{i(t)} \cdot \frac{P_{i(t)}S_{i(t)}}{\sum_{j \in C_{i(t)}} P_{j(t-1)}S_{j(t)}}) \cdot I_{(t-1)}$$

4.6 Index Dissemination Frequency

BPP is updated every 5 minutes. BitUP will decide whether or not to calculate the index in case of abnormal quotations from exchanges.

5 Index Constituents

Category	Constituent
65%	HT
	BNB
	OKB
20%	FT
	ZB
	BIX
15%	OTB
	KCS
	BUT

Appendix A: Index Calculation Explanation

A.1 Symbol Definition

i: Constituent assets

t: Time

$C_{i(t)}$: Category of constituent i at time t

$P_{i(t)}$: Price of constituent i at time t

$S_{i(t)}$: Circulating supply of constituent i at time t

$W_{i(t)}$: Index weight of constituent i at time t

$D_{i(t)}$: Index of constituent i at time t

$I_{(t)}$: Index level at time t

A.2 Initial Index Weight

Index weight is the percent weight of an individual constituent in the index. The sum of all index weights adds to 100%.

$$W_{i(t-1)} = C_{i(t-1)} \cdot \frac{P_{i(t-1)} S_{i(t-1)}}{\sum_{j \in C_{i(t-1)}} P_{j(t-1)} S_{j(t-1)}}$$

A.3 Index Weight Adjustment

When changes occur to constituent list, circulating supply or category, or constituents' circulating market capitalization changes due to non-trading factors, BPP adopts the "Index Weight Adjustment Methodology" to adjust the old index weight to keep the index comparable.

$$W_{i(t-1)} = C_{i(t)} \cdot \frac{P_{i(t-1)} S_{i(t)}}{\sum_{j \in C_{i(t)}} P_{j(t-1)} S_{j(t)}}$$

The new index weight derived from this formula is used for later index calculation.

A.4 Index Calculation Formula

$$I_{(t)} = \sum D_{i(t)}$$

$$= \sum (D_{i(t-1)} \cdot \frac{P_{i(t)}}{P_{i(t-1)}})$$

$$= \sum (W_{i(t-1)} \cdot I_{(t-1)} \cdot \frac{P_{i(t)}}{P_{i(t-1)}})$$

$$= \sum (\frac{P_{i(t)}}{P_{i(t-1)}} \cdot W_{i(t-1)}) \cdot I_{(t-1)}$$

$$= \sum (\frac{P_{i(t)}}{P_{i(t-1)}} \cdot C_{i(t)} \cdot \frac{P_{i(t-1)} S_{i(t)}}{\sum_{j \in C_{i(t)}} P_{j(t-1)} S_{j(t)}}) \cdot I_{(t-1)}$$

$$= \sum (C_{i(t)} \cdot \frac{P_{i(t)} S_{i(t)}}{\sum_{j \in C_{i(t)}} P_{j(t-1)} S_{j(t)}}) \cdot I_{(t-1)}$$