RDA 10 Index Portfolio

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Xtant Real®   The Xtant Real Digital Asset 10 Index (RDA 10 Index for short) is a fundamentally weighted index designed to measure the daily and long-term movement of the top ten cryptoassets by Intrinsic Value (IV) and Real Market (RM) ratio. The portfolio consists of 10 assets with the highest RM ratios selected from assets with the best IV ratings. The weight of each asset within this fundamental portfolio is determined by their relative RM ratio.

1 RM Ratio

The RM ratio of an asset is defined as the ratio of its calculated fundamental price (RDA Price) over its market price. This ratio gives an indicator on the level of speculation in the market. An RM ratio close to 1 reflects minimal speculation on the asset, while further values of the RM ratio indicate higher levels of mispricing.

As both the market price and the RDA price move, the RM ratios evolve as follows:

- If the gap between the RDA price and the market price closes, the RM ratio becomes close to 1 signaling the closing of the position in this asset.
- If the gap between the fundamental price and the market price widens, the RM ratio becomes even higher inferring that a higher allocation should be given to this asset.

2 Constituents Selection

The index constituents are first selected based on the top 500 assets by market capitalisation, then filtered by top 100 by IV ranking (i.e. RDA Points), and further filtered by top 50 by IV rating and finally filtered by RM ratio to arrive at 10 constituents of the RDA 10 Index portfolio.

3 Weight Allocation

Let i be the index of an asset selected for the RDA 10 Index. i ranges from 1 to 10. Let RM_i be the RM Ratio of asset i. Then the weight of asset i is given by:

$$\omega_i = \frac{RM_i}{\sum_{i=1}^n RM_i} \tag{1}$$
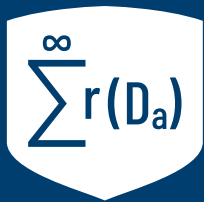
4 Index Value Calculation

Between rebalancing dates, the index value is defined by:

$$TI_t = \sum_{i=1}^{10} \omega_i \frac{P_i(t)}{P_i(0)} \tag{2}$$

where TI_t is the value of the index at time t, ω_i is the weight of the ith asset in the index, and P_i is the price of the ith asset as a function of time. On rebalancing dates, the weights are normalized in such a way that the index value is the same, whether it is computed with old or with new weights. The index is calculated in realtime.

5 Backtesting Results

Backtesting shows RDA 10 Index a better investment vehicle than marketcap-weighted portfolios and a much safer approach to building a portfolio of cryptoassets with least systemic risk. Backtesting results are available upon request.

Real
Digital Asset Index