World Currency is a global reserve currency backed by popular currencies. It's a virtual currency based on a value-weighted index, in which each currency in a basket influences the index in proportion to its exchange rate and spread for every combination of pairs of currencies traded. The overall average of the rate exchanges determines the final value of the World Currency (W).

$$W = \left\{ \frac{\bar{G} = \left[\dfrac{\sum_i^n \left(\dfrac{V^t Cx_i + V^{t-1} Cx_i}{V^t Cx_i} \right)}{n\ Currencies} \right] + \bar{A}}{\bar{A} = \left[\dfrac{\sum_i^n \left(\dfrac{Cx_i}{Cx_{i+1}} + 1 \right)}{n\ Currencies} \right] + 1} \right\}$$

W: Value of World Currency.

A: Average of exchange rates between each pair of currencies in the basket.

G: Average of spreads between each pair of currencies in the basket over time.

N: Number of currencies in the basket.

Cx: Current exchange rate of the currency of the index.

V: Current value of the currency of the index.

T: At past and future time period.