

The BO Stablecoin System

Whitepaper

<https://bohrweb.org/>

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Collateralized Debt Position Smart Contracts

BO Stablecoin is the mortgage stabilization currency system on BoHr, BR (BoHr) is too volatile to be used as everyday currency. Based on the BoHr smart contract, the stable currency BO Stablecoin (hereinafter referred to as BO) is obtained by mortgaging BoHr. BO is the cryptocurrency guaranteed by mortgage. The value of 1 BO is equivalent to 1 US dollar. We believe that stable digital assets like BO Stablecoin are essential to realizing the full potential of blockchain technology.

BR Maker is a smart contract platform on BoHr. The price of BoHr can be dynamically obtained through oracle and self feedback mechanism and appropriate dividend mechanism are used to manage the target parameters of BO. BR Maker enables anyone to use BoHr assets to generate BO in BR Maker platform. After generation, BO can interact with any other cryptocurrency. Its value can be used for basic stable currency, payment of goods or services, long-term storage and other advantages. What's more, there are corresponding BoHr collateral behind each BO to ensure the long-term stable value of BO. The required components built on BR maker platform provide strong support for BO. Anyone with mortgaged assets can use the unique

smart contract of BR Maker to generate debt by using BoHr mortgage, so as to generate BO. The debt is locked in the smart contract address until it is made up by repayment of BO and a small amount of interest. At this time, the owner can withdraw the collateral again. The utility of mortgage rate makes the total BO lower than the debt value of its collateral BoHr.

Interaction process between BoHr and BO

The process of BO Stablecoin obtained by mortgaging BoHr through BR Maker platform is as follows:

- **Step 1:Create a debt contract**

the actual amount of mortgage BoHr and the current BoHr price are used to generate BO, and the amount of BO obtained after its total value is converted is related to the mortgage rate.

- **Step 2:Generating BO from mortgage contract**

The mortgage contract obtains the market price through the oracle and searches the number of BO they want. At the same time, the mortgage contract generates the same amount of debt, which makes them unable to use the collateral until the outstanding debt has been paid.

- **Step 3:Debt repayment**

When users want to get back the collateral, they must repay the debt in the mortgage contract and the interest expense on the debt over time. Interest can only be paid in BO. Once the user sends the principal and interest necessary to repay the BO

to the debt contract, the debt will be cancelled and all the collateral in the mortgage contract can be freely retrieved from the wallet.

Price Stability Mechanisms

The target price of the price stability mechanisms BO is 1 USD, as long as it contains three functions:

- **Excess Mortgage:**

BoHr's market feedback the real transaction price, but this does not mean that all BoHr have this price. We plan to initially set the mortgage rate of BoHr to 10%, and capture the external price through the oracle. This process can be easily completed on the blockchain in real time. The contract will store the corresponding user's current BoHr's price, current mortgage rate, interest rate and other parameters to obtain the final available BO amount. Under the premise of excess mortgage, it provides sufficient collateral guarantee for BO.

- **Clearing system:**

In extreme market conditions, when the risk is triggered, the actual discount of BoHr cannot guarantee the mortgaged BO. In BR Maker platform, after the clearing system is triggered, the BO cannot be repaid, and the corresponding collateral BoHr is directly destroyed.

- **Whitelist contract regulation:**

The whitelist system is a unique promotion system of BoHr, which supports users to use BO to open the whitelist and participate in mining. The BO summarized in the whitelist contract does not pass through any party, and no one can spend. The BO in the whitelist contract is first used for the destruction of the BO without collateral in the clearing system, and then used for the construction of decentralized foundation.

With the dynamic change of target mortgage rate and interest rate, the regulation of whitelist contract is started to adjust the BO generated and held by users, and applied by foundations or developers. The feedback mechanism will push the market price of BO to around 1 USD. Through this regulation, the volatility of BO will be restrained, and the liquidity will be tightened or increased in the case of demand conflict.

Sensitivity parameters

Sensitivity parameters are all parameters of BR Maker platform, which are used to determine the target interest rate range that changes in response to the deviation of BoHr mortgage market and BO stable price formation. This will feed back the real consensus needs of users and directly reflect them in the scale of the system.

BR Maker can vote to determine the sensitivity parameters, including mortgage rate voting, interest rate voting, etc. the sensitive parameters are designed to connect the mortgage rate and interest rate of users in the mortgage contract. In BR Maker platform, all parameters have upper and lower limits, which provides a directional choice for all voting to maintain the stability of BO in BoHr system.

Insurance contract (Anti clearing system)

In the BR Maker platform, there are enough participants who will not observe the mortgage situation every day for the rise and fall of the price, which is considered as passive defense and can't hold and interact BO with ease. We have embedded insurance contracts in BR Maker mortgage contracts. The creation process is as follows:

(1) Users choose whether to join the insurance contract when they mortgage BoHr, which will activate the anti clearing system.

(2) After the user confirms, the system will call to create and process the contract.

(2) When the price reaches the price position set by the clearing system, the BoHr mortgaged by the user will not be destroyed.

However, joining the insurance contract does not mean that users can obtain BO by unrestrained mortgage. In the insurance contract, we have added a market prevention and control mechanism, that is, after joining the insurance, the redemption price will rise by 20%, that is, the liquidation price will be 10%, and the redemption price will be 30%. In

terms of global user processing, each user's mortgage price is different, and there is enough room for the market to rise of the collateral in the insurance contract will not impact the market.

Due to the competition and scarcity of the market, the total destruction of 8350000 BRM will cause unexpected damage to the whole BRM ecology. Therefore, the amount of BRM needed for BoHr to join the insurance contract is decreasing:

Year 1: destroy 1 BRM to join insurance contract

Year 2: destroy 0.1 BRM to join insurance contract

Year 3: destroy 0.01BRM to join insurance contract

Year 4: destroy 0.001 BRM to join insurance contract

Year 5 and beyond: destroy 0.0001BRM to join insurance contract

BR Maker governance

The governance of BR Maker is not very complex and flexible. In the BR Maker platform, the proposal contract will be assigned regularly. Through the internal programming visual management window, the root access right proposal will be continuously used. In the application, the second layer governance logic will directly create and submit the contract. The user can vote on the risk parameters within the defined time period by voting, so as to achieve the agreement update.

Any BoHr account with BRM token can vote, and the amount of BRM is directly equal to the number of votes. These include:

(1) BRM governs token voting and decides annual interest rate (+ 0.1%, unchanged, - 0.1%), initial 6.4%, maximum 15% upper limit and minimum 1% lower limit.

(2) BRM governs token voting and decides mortgage rate (+ 0.5%, unchanged, - 0.5%), initial 10%, maximum 50% upper limit and minimum 5% lower limit.

(3) BRM foundation governs voting, voting institutions or developers' application results for rewards. The voting rate is more than or equal

to 51%.

(4) Call the liquidation BoHr and white list contract in BR Maker mortgage contract to destroy the BO assets without collateral behind.

(5) Receive the BO dividends generated by all participants after mortgage.

(6)

Automatic clearing of risky BoHr

In the process of mortgage, the risk clearing system triggered by mortgage oversold. When the clearing system is insufficient due to market collapse, BR Maker platform will automatically clear the BoHr mortgaged by the clearing house. At this time, the BoHr mortgaged by the clearing participants does not need any permission and is destroyed in the contract.

Debt liquidation (Liquidation unsecured BO Stablecoin)

Whitelist contract system plays a more important role in BO Stablecoin system. After users open the whitelist, the incoming BO enters the whitelist contract address, which is used to raise enough funds to inject capital into the system. When an external participant is directly cleared and there is no collateral behind the corresponding BO, the whitelist automatic clearing system will be triggered automatically. If there is no collateral behind the external BO, the same amount of BO will be destroyed in the whitelist contract.

BO in the whitelist contract becomes the last line of defense in the BO Stablecoin system, but it does not mean that the more BO in the whitelist contract, the better. It only needs to ensure that it has enough BO to deal with the market Black Swan incident.

BRM governance decentralization foundation reward scheme

The BO in the whitelist contract address, the required risk clearing BO when there is enough amount, BRM voters can vote to extract the BO and distribute it to the builder.

Builders need to make corresponding contributions to BoHr. They can apply for the capital through the reward scheme, set up a special team and implement the promised plan. BRM, as the supporter and opponent of the whole process, votes on the project to decide whether the construction of the special team is effective.

Conclusion

(1) BO Stablecoin plays an important role in BoHr, providing enough stable foundation for defi.

(2) All contract calls are displayed to participants through visual window, which is friendly to beginners and novices.

(3) The model of BRM deflation increases the scarcity of BRM. At the same time, BRM plays the role of governance and dividend, allowing it to participate in governance while enjoying incentives.

(4) The whitelist contract system is an important defense line of BO Stablecoin, which can be used not only for risk clearing, but also for decentralized foundation governance.

(5) Double collateral risk clearing (BoHr clearing and BO clearing) plays a protective role in the black swan incident, which will improve the stability of BO. At the same time, it can be regulated in the whitelist contract system, so that the floating of Bo is close to 1 USD.

(6) In the future, enough DAPP will be built on BoHr to provide a

prosperous ecological environment for BoHr.