PPBank: A decentralized stablecoin banking system for all

Introduction

The development of the Internet technology has seen a rapid rise of the digital economy. Traditionally, the world has relied on legal tender such as the US dollar to exchange value. However, there is huge risk of relying on centralized bank systems as exemplified by the collapse of many fiat currencies in recent years. Pioneering visionaries answered the call for a decentralized replacement of the central bank with the revolutionary invention of cryptocurrencies such as Bitcoin and Ethereum, but most cryptocurrencies are still highly volatile today and are not suitable for being used as media of exchange.

As an alternative approach and a middle ground, stablecoins pegged to fiat currency, such as USDT, USDC and PAX, were invented. They have boosted the liquidity of the cryptocurrency market to a great degree. However, most of the widely used stablecoins are still issued by centralized entities and carry too much risk of censorship. On the other hand, decentralized stablecoins such as DAI and USDX have not seen comparable market share.

We believe that much can be done to improve the popularity of decentralized stablecoins. The PPBank project is our attempt at building a decentralized banking and finance system around a new stablecoin. We want to point out that PPBank does not aim to replace other stablecoins, but rather complement them. We envision that a plethora of stablecoins with different degrees of decentralization will bring wider adoption of cryptocurrencies.

Components and mechanisms

Dual-token structure

PPBank contains two types of tokens, PC and PPB. PC, short for PCash, is a decentralized stablecoin pegged to the US dollar with variable supply. PPB is the governance token with fixed supply. PC is meant to be used for day-to-day payments while PPB is used for staking and voting in the system.

CDPs and minting PC

PCs are minted by the opening of CDPs (Collateralized Dept Positions). Users deposit ETH, tokenized BTC or other accepted cryptocurrency assets into the smart contract to generate PCs. When they close the CDPs, PCs are burned accordingly. We will integrate decentralized oracles to facilitate liquidation if a user's deposit falls below the margin requirement.

Liquidity mining for asset deposits

Tentatively, 315 million PPB or 15% of the total PPB supply is reserved for liquidity mining by opening CDPs. PPB will be released every epoch of multiple Ethereum blocks and distributed in proportion to the new deposits.

Liquidity mining for borrowers

Tentatively, 840 million PPB, or 40% of the total PPB supply is reserved for liquidity mining by borrowers of PC.

Integrated swap protocol

We will implement a swap protocol between PC and other stablecoins with lower slippage than Uniswap.

Referral rewards

We will implement a gradually decreasing referral reward system to encourage users to participate in liquidity mining.

PPB staking

Users will be able to stake their PPB to earn extra rewards. The rewards come from the revenue of market making in the liquidity pools.

Community governance

PPB tokens will be used for governance voting on all changes of system parameters.

Credit-based lending

We plan to explore credit-based lending to complement the collateral-based minting of PCs at a later stage. Users will need to stake some PPB to participate in credit-based lending, and malicious actors who breach the contracts will have their PPB confiscated and burned.

Insurance

DeFi projects are inherently accompanied by large risks. To enhance the safety of the users funds, PPBank will explore the field of decentralized insurance later in the development.

PPB token issuance and allocation

PPB is an ERC-777 token with a total supply of 2.1 billion.

55% will be unlocked via liquidity mining, using a formula that will be specified in a later version of the whitepaper.

21% is allocated to the founding team with an unlock planned in three stages. The first 7% will be released on the last day of the month when the PPBank platform is live. Each 7% of the rest will be unlocked 90 and 180 days after the first unlock.

21% is allocated to the PPBank foundation. Within them, 7% is used for early stage marketing and referral rewards. 14% is reserved for later-stage development, marketing and operations.

3% is used as the initial liquidity for activities such as Initial Uniswap Offering and airdrops.

Currently, the project has no private investors and the funds required for the initial development are provided by the members of the anonymous team themselves. There is also no allocation planned for future investors.

PPB token burn

PPB tokens will be consumed and burned in a few ways. The profit of the platform will be used to buyback and burn PPB. New governance proposals will consume a small amount of PPB. Malicious actors in credit-based lending will have their PPB slashed and burned.

Team

The project is founded by an anonymous team. While the initial team is leading the current development, all contributors are welcome and more community involvement is expected as the project evolves into later stages.

Tentative roadmap

Stage 1 (Q3 2020 - Q4 2020)

- Depositing cryptocurrency assets and minting PCs by opening CDPs.
- Lending pool for PC.
- Liquidity mining for PPB by depositing and borrowing
- Initial implementation of swap between PC and stablecoins.

Stage 2 (Q4 2020 - Q1 2021)

- PPB staking
- Referral rewards
- Improved swap exchange

Stage (Q1 2021 - Q2 2021)

- Community governance, voting for parameter change with PPB tokens
- Gradual withdrawal of the founding team

Stage 4 (Q2 2021 - Q3 2021)

- Infrastructure for credit-based lending
- Exploration of insurance

Stage 5 (Q3 2021 -)

- Maintenance of all components and integration with other protocols

The tentative roadmap is subject to change and the direction of the project will be set by community governance.

Project status

The project has secured sufficient funding for the first stage of development. A team of developers is actively working on the various components. The whitepaper will be updated with more technical details as design and implementation proceed.

Disclaimer

The founding team is carrying out the development of PPBank This project is being carried out earnestly and continuously improving. While we are obliged to present everything in its authenticity, we take no responsibility in the profits or losses from investing in PPB.

Acknowledgement

We appreciate the followers and collaborators of the project. Together, we set out to build a decentralized bank for the greater good.