InfinityDefi White Paper

Contents

InfinityDefi is a composite DeFi product with highly flexible collateral and redemption mechanisms. The unique multi-collateral and multi-value-added loans of the InfinityDefi protocol uncover the greater monetary value, appreciation space and liquidity for digital assets of global users.

InfinityDefi bridges the gap between idle monetary assets and short-term borrowing demand, providing a bigger profit space and a stable cryptocurrency collateral ecology.

1 Background

1.1 InfinityDefi Protocol

InfinityDefi is a DApp on Ethereum.

The cross-chain (to be developed), multi-currency, and multi-collateral system of the InfinityDefi Protocol includes the Polymerization Pool with collateral and debt of all users, Price Oracle, auction, and autonomous management. Users can pledge stablecoins and other cryptocurrencies as collateral to serve their borrowing needs and generate multi-collateral DeFi products.

In the unique Polymerization Pool with the fund adjustment mechanism, the protocol algorithm, and the price feeder adjust the interest rate dynamically for the stability of the InfinityDefi ecosystem. E.g. when there is a shortage of ETH, the ETH pledge rate grows.

From the start till the end, InfinityDefi is decentralized, transparent, and fair.

1.2 PPT Equity Token

Users get additional PPT equity tokens for each pledging, loan, and secondary pledging.

The generation and distribution of PPT are decentralized. Users can pledge or borrow money from the market to earn PPT in a trustless way without centralized institutions.

PPT earnings depend on the amount and term of users' pledges and loans.

Users can convert PPT to the ecosystem token INFI. The exchange is one-way only and INFI cannot convert to PPT. When PPT converts to INFI, the respective PPT is burned.

PPT can be converted to a maximum of 6,400,000 INFI.

PPT to INFI conversion feeds decentralized governance, management, and revenue sharing.

1.3   INFI Ecosystem Token

INFI generation through PPT-INFI conversion starts when the first PPT equity token is generated.

INFI total supply is 21,000,000 (limited).

INFI holders participate in the project management, control the financial risk of InfinityDefi, and therefore ensure the stability, transparency, and efficiency of the protocol. They govern the ecosystem and share its benefits.

InfinityDefi management rights are directly proportional to the number of INFI voters have in the voting contract. The more INFI you hold, the more power you have.

2 Introduction

2.1 Market Trend

Unlike the traditional centralized finance, decentralized finance (DeFi), refers to various financial applications build on open decentralized networks. It aims to establish a multi-level financial system that reshapes and improves the existing finance with blockchain technology and cryptocurrency.

Since the birth of blockchain technology, its distributed storage and decentralization attribute has great advantages that traditional financial model can't match, including but not limited to: transaction transparency and low cost, self-control of private property, participation in exit liberalization and so on.

The distributed storage and decentralization of blockchain are the great advantages that traditional finance cannot have. Blockchain has transparent and low-cost transactions, self-control of private property, and the freedom of entry and exit.

In 2020, the market scale of DeFi entered the billion range. The common DeFi applications are decentralized exchanges (DEX), lending platforms, and stablecoins.

2.2 Existing Pain Points

A Developing Market with a Small Share

Industry analysis shows that the total capitalization of DeFi is still relatively small compared with the whole cryptocurrency market. DeFi is still at the early development stage where it faces challenges and unlimited development opportunities.

Decentralization and Slow Interaction

Due to the slow processing speed and congestion on Ethereum mainnet, the interaction speed of smart contracts is slow and UX is poor, which pushes users away. Ethereum needs upgrades to meet the needs for financial services of ordinary users.

A Long Process and High Learning Threshold for Users

Although decentralized wallets are popular among advanced blockchain users, they are still mostly used for transfers and savings. Only one third of users has used DApps. DeFi requires skilled use of wallets, high user proficiency, and a long learning process.

Popularization of blockchain and optimization of DeFi product interaction will help solve these shortcomings to attract more users and benign funds to DeFi applications.

InfinityDefi pursues boosting the development of DeFi, market share expansion, overcoming or breaking through the functional limitations, and facilitation of user interaction.

3 InfinityDefi Protocol Features

3.1 InfinityDefi Protocol

InfinityDefi Protocol is a DApp on Ethereum.

InfinityDefi Protocol is a cross-chain, multi-currency, and multi-collateral system that is different from P2P loans. It includes the Polymerization Pool that combines the collateral and debt of all users, Price Oracle, auction, and autonomous management. Users can pledge stablecoins and other cryptocurrencies as collateral.

3.1.1 Supported Cryptocurrencies

Currently, the following cryptocurrency types can be used as collateral for lending and borrowing:

A: DAI, USDT, USDC, TUSD

B: BUSD, HUSD

C: ETH

D: HT, OKB

E (Multi-collateral Loans): other decentralized smart contracts: MakerDAO (to be developed)

3.1.2 Pledge Ratio

InfinityDefi Protocol sets a pledge rate to ensure that assets in the Polymerization Pool have excess backing by stablecoins and

mainstream cryptocurrencies. The value of collateral is always higher than the value of debt and all transactions are public on blockchain.

1) initial pledge ratio (IPR)

The initial pledge ratio is the ratio of value conversion when users pledge some currency.

InfinityDefi has the following initial pledge ratio for different cryptocurrency types:

Type	A	B	C	D
IPR	1.2	1.3	1.45	2

For example, a user can borrow up to 10,000 USDT in any supported currency by pledging a market equivalent of 14,500 USDT in ETH (type C asset).

2) operating pledge ratio (OPR)

The operating pledge ratio is the ratio of the market value of the borrowed currency to the market value of the pledged currency after a user borrows a currency.

$$OPR = \frac{\text{borrowed currency} \times \text{market price}}{\text{pledged currency} \times \text{market price} - \text{payable interest} - \text{payable fees}}$$

When the operating pledge ratio is lower than the minimal pledge ratio, the market price of collateral becomes below the liquidation price, and the InfinityDefi Protocol initiates liquidation.

3) minimal pledge ratio (MPR)

Type	A	B	C	D
MPR	1.1	1.2	1.25	1.6

3.1.3 Loan Rate

When a user borrows a currency, it pays interest. When a user pledges (deposits) a certain, it earns interest.

Besides the functions of traditional DeFi loans, the InfinityDefi Protocol also developed a dynamic fund pool adjustment mechanism. It changes the interest rate according to the ratio of different currencies in the pool to balance the supply and demand of each currency.

The ith currency in the fund pool is referred to as "currency i" or "i".

Definition:

$$M(i) = ln\left(\frac{\text{market value of unlent currencies in PP}}{\text{market value of unlent currency } i \text{ in PP}}\right)$$

If the market value of unlent currency i in PP is 0, M(i) = 66.

PP is Polymerization Pool.

1) payable loan interest

$$i \text{ loan rate p.a.} = \min\left(2\% + 3\% \times M(i), 200\%\right)$$

$$\text{payble interest} = \frac{\text{market value of borrowed } i \times \text{interest rate of } i \times H}{24 \times 365}$$

where H is the user's currency i loan term in hours.

2) accrued pledge interest

The jth currency in the fund pool is referred to as "currency *j*" or "*j*".

$$j \text{ pledge interest} = \frac{\sum j \text{ accrued interest}}{\text{market value of pledged } j}$$

$$\text{accrued interest} = \frac{\text{market value of user's pledged } j \times \sum j \text{ accrued interest}}{\text{market value of total pledged } j}$$

In its core features, InfinityDefi is different from the existing DeFi products. Besides the popular collateralized lending, users can perform secondary pledging of their pledge agreement to a third party on the platform for a wider arbitrage space. Borrowing and lending is also possible through multiple pledging of the value-added part of collateral.

3.2 InfinityDefi Redemption and Closure

After completing the storage, exchange, accounting, borrowing, and lending on the InfinityDefi Protocol, users can close their contract. To close the contract and redeem the collateral, users need to repay the loans, interest, and fees. The closure mechanism serves for the rebalancing and stability of the Polymerization Pool.

The fees paid by users enter the profit pool and INFI holders vote on their allocation.

3.3   Polymerization Pool

Any user can pledge supported assets that meet the protocol requirements to the Polymerization Pool to obtain the borrowing rights.

Users can put their collateral to the Polymerization Pool to invoke the InfinityDefi Protocol. To redeem the collateral from the pool, users need to return the loan + interest + fees to the pool.

$$\text{fee} = \text{total deposit interest} \times 10\%$$

or

$$\text{fee (PPT)} = \text{currency market value at the borrowing time} \times 0.02\%,$$

(paid at PPT market price, to be developed)

Users interact with the Polymerization Pool directly through the InfinityDefi Protocol. As long as the market price of collateral does not touch the liquidation price, users can redeem the collateral freely.

3.4 Polymerization   Pool   Position   Coverage   and   Liquidation

InfinityDefi Position Coverage

When the market price of collateral fluctuates and the operating pledge ratio becomes lower than the initial pledge ratio but higher than the minimal pledge ratio, the user must increase collateral to cover the position.

To ensure that the InfinityDefi Protocol always has sufficient collateral to back the repayment of debts, any debt with the operating pledge

ratio below the minimal pledge ratio is liquidated automatically.

The InfinityDefi Protocol determines that the collateral touches the liquidation price when:

$$OPR < MPR$$

InfinityDefi Liquidation

Each time the liquidation mechanism triggers, 50% of the user's collateral in the Polymerization Pool is liquidated at the market price. If OPR becomes more than MPR, liquidation stops. The debt of the Polymerization Pool (including loan principal, payable interest and 8% liquidation fee) shall be paid in priority and the remaining collateral (if any) shall be returned to the borrower.

If the collateral is not enough to repay the debt after liquidation, the loss becomes the liability of the InfinityDefi Protocol and is repaid by the Pledge Buffer. The Pledge Buffer pools liquidation and redemption fees to avoid situations when collateral liquidation is not enough to repay the principal and interest of the lender.

(Future planning) The ecosystem will grade assets as priority, interlayer, and regular ones. In extreme financial environments, liquidation will trigger in the hierarchical order.

If the collateral buffer exceeds the upper limit stipulated in the InfinityDefi Protocol (set through governance), the excess part is classified as surplus. INFI token holders decide on the surplus distribution method jointly through governance.

3.5 PPT Equity Token

PPT is mined through pledging and lending. PPT-INFI conversion becomes available when the first PPT equity token is generated.

Mechanism: time + PoS

Function: ecosystem token INFI exchange voucher

3.5.1 PPT Generation: Pledging, Lending

To encourage the usage of InfinityDefi Protocol, during the first 96 hours after the listing of each new token/coin, users enjoy special rewards:

0 to 24 hours post-listing (from Ethereum block at the token/coin listing x to x + 5,760 block height):

(1) Pledging: each 625 USDT equivalent of digital assets gets 1 PPT.

(2) Lending and Multi-value-added Lending: each 625 USDT equivalent of digital assets gets 2 PPT.

0 to 24 hours PPT cap: 400,000 tokens. If all PPT cap is claimed before x + 5,760 block height, the next stage starts.

24 to 48 hours post-listing (Ethereum blocks x + 5,760 to x + 11,520):

(1) Pledging: each 1,250 USDT equivalent of digital assets gets 1 PPT.

(2) Lending and Multi-value-added Lending: each 1,250 USDT equivalent of digital assets gets 2 PPT.

24 to 48 hours PPT cap: 400,000 tokens. If all PPT cap is claimed before

x + 11,520 block height, the next stage starts.

48 to 96 hours post-listing (Ethereum blocks x + 11,520 to x + 23,040):

(1) Pledging: each 2,500 USDT equivalent of digital assets gets 1 PPT every 24 hours.

(2) Lending and Multi-value-added Lending: each 2,500 USDT equivalent of digital assets gets 2 PPT every 24 hours.

48 to 96 hours PPT cap: 400,000 tokens. If all PPT cap is claimed before x + 23,040 block height, the next stage starts.

96 to 168 hours post-listing (Ethereum blocks x + 23,040 to x + 40,320):

(1) Pledging: each 5,000 USDT equivalent of digital assets gets 1 PPT every 24 hours.

(2) Lending and Multi-value-added Lending: each 5,000 USDT equivalent of digital assets gets 2 PPT every 24 hours.

96 to 168 hours PPT cap: 400,000 tokens. If all PPT cap is claimed before x + 40,320 block height, the next stage starts.

Regular rewards after 168 hours post-listing (after Ethereum block x + 40,320):

(1) Pledging: each 10,000 USDT equivalent of digital assets gets 1 PPT every 24 hours.

(2) Lending and Multi-value-added Lending: each 10,000 USDT equivalent of digital assets get 2 PPT every 24 hours.

(3) Secondary Lending: each 10,000 USDT equivalent of digital assets get 3 PPT every 24 hours.

3.5.2 PPT-INFI Conversion

30.5% of INFI is reserved for PPT-INFI conversion.

The number of INFI to convert with PPT is limited to 6,400,000 (21,000,000 × 30.5%).

Conversion formula:

$$\text{INFI} : \text{PPT} = 0.01 \times log\,2\left[1 + \left(64 - \frac{\text{already converted INFI}}{100{,}000}\right)\right] : 100$$

Over time, as the INFI to PPT conversion volume increases, the PPT-INFI conversion ratio will gradually decrease. At first, 100 PPT is 6 INFI. After converting 3,200,000 INFI (50% of 6,400,000), the rate will change to 100 PPT = 5 INFI.

To maintain the sustainable development of the InfinityDefi ecosystem, each 100 PPT obtained by users will generate additional 5 PPT to be transferred to the foundation to form the InfinityDefi Ecosystem Development Fund.

3.5.3 PPT Burn

After conversion to INFI, PPT is burned.

3.6　Ecosystem Token INFI

3.6.1　INFI Total Supply

INFI total supply is 21,000,000 (limited).

3.6.2　INFI Distribution

PPT conversion: 30.5%;

Future derivatives application: 39.5%;

Community and market: 15%;

White list: 5%;

Team: 10%.

Ultimately, InfinityDefi Foundation will not hold any INFI and relinquish all voting rights, but independent members of the team will have the right to vote.

3.6.3　INFI Burn

InfinityDefi ecosystem governance, voting, or usage burns INFI.

3.6.4　INFI Functions

INFI holders participate in the project management, control the financial risk of InfinityDefi, and share the ecosystem benefits. This ensures the stability, transparency, and efficiency of the InfinityDefi Protocol.

INFI voting and decision-making include:

- Addition or removal of a cryptocurrency supported for collateral;

- Adjustment of redemption and liquidation fees;

- Adjustment of pledge ratio and interest rate;

- Polymerization Pool profit distribution;

- Selection of nodes for price feeder;

- Triggering of the emergency mechanism and shutdown;

- Issue of InfinityDefi derivatives;

- Launch of InfinityDefi operations, maintenance, and marketing.

3.7 Secondary Loans

In addition to normal collateralized lending, InfinityDefi users can pledge their pledge agreement to a third party as collateral to get a wider arbitrage space. The third-party lender has the pledge creditor's rights. That is, a normal collateralized loan agreement can be used as secondary collateral.

The pledger can trigger the secondary collateralized loan through the pledge agreement. When the lender of the first collateralized loan has an urgent short-term capital demand, it can become a borrower with secondary collateral, sell its creditor's rights, and get a bigger loan than the first collateral.

InfinityDefi secondary collateralized loans will greatly improve the capital flow and utilization, avoid the risk of capital chain break, and reduce the user risk to encourage the involvement of more

cryptocurrency users.

Case 1: a secondary collateralized loan within the same platform (ETH and USDT)

Participants:

A is a borrower with primary collateral and a borrower with secondary collateral.

B is the secondary collateral Polymerization Pool.

Rundown:

A pledges ETH with a market value of 1.45 USDT, gets a loan of 1 USDT from the InfinityDefi Protocol, and pays a 5% interest (the actual figure is calculated according to the formula).

A needs temporary funds in the short term. It transfers the pledge agreement to B, becomes the borrower with secondary collateral, gets a secondary loan of 10% of the primary loan (in this case, 0.1 USDT), and pays a 7% interest (the actual figure is calculated according to the formula).

B only lends 0.1 USDT to get a collateral agreement with a 7% interest (the actual figure is calculated according to the formula).

Redemption:

A pays 0.1 USDT plus interest and redeems the agreement from B.

A pays 1 USDT plus interest and redeems ETH from the Protocol.

Position coverage level: 145%

When ETH price falls and the pledge ratio is below 1.45, A needs to cover its position in time (i.e. supplement ETH).

Liquidation level: 125%

When ETH price continues to fall and OPR is below MPR (125%), the liquidation mechanism triggers. The Protocol liquidates at the current market price and B gets the remaining ETH (if any) after the payment of the principal of 1 USDT + interest + liquidation fee (8%).

If B fails to pay, the platform liquidates the collateral at the market price to repay B's debt / Protocol debt and the 8% liquidation fee. The remaining balance (if any) returns to A.

Case 2: a cross-platform secondary collateralized loan (ETH and DAI)

Participants:

A is a borrower with collateral in a smart contract on a third-party platform and a borrower with secondary collateral.

B is the secondary collateral Polymerization Pool.

Rundown:

A pledges ETH @ x1.5 in a smart contract on a third-party platform to get a 1 DAI loan.

A needs temporary funds in the short term. It transfers the pledge agreement to B, becomes the borrower with secondary collateral, gets a secondary loan of 10% (in this case, 0.1 DAI), and pays a 7% interest

(the actual figure is calculated according to the formula).

B only lends 10%, i.e. 0.1 DAI, to get A's current secondary collateral agreement.

Redemption:

A pays 0.1 DAI plus interest to B to redeem the agreement.

Position coverage level: same as in the smart contract on a third-party platform

When ETH price falls and the pledge ratio is lower than the position coverage level, A needs to cover the position in time.

Liquidation level: the collateral liquidation level of the smart contract on a third-party platform + 5%

When ETH price continues to fall and the operating pledge ratio is below the liquidation level, the liquidation mechanism triggers and B has the priority rights for collateral redemption.

If B pays the platform the liquidation fee (8%), it becomes the agreement owner and can pay 1 DAI to redeem the collateral from the smart contract on a third-party platform.

If B fails to pay the platform the liquidation fee (8%), the platform redeems A's collateral from the smart contract on a third-party platform and liquidates the collateral at market price to repay B's debt and liquidation fee. The remaining balance (if any) returns to A.

3.8 Multi-value-added Lending (MVA)

Since price fluctuation is in the nature of cryptocurrency, InfinityDefi ecosystem has developed the flexible multi-value-added loans to leverage the appreciation space of collateral prices. The protocol performs multiple collateralization along with the continuous appreciation of borrower's collateral.

Participants:

A is a borrower with primary collateral and an MVA loan borrower.

Case (ETH and USDT):

A gets a loan of 1 USDT after pledging ETH @ x1.5 in the on-platform and cross-platform fund pools (multiple pledging is available).

Over time, ETH price rises and A's pledge ratio increases to x2.

A can pledge its primary pledge agreement again to get an additional loan for the value-added part of the collateral, i.e.

$$\frac{2 - 1.5}{1.5} = 0.33 \text{ USDT}$$

The InfinityDefi Protocol allows A to borrow the value-added part of the collateral when the collateral value increases by more than 33%.

Redemption:

A performs a single payment of 1.33 USDT plus a 5% interest (the actual interest is calculated according to the formula) to redeem the agreement.

Position coverage level: 150% of the total loan

When ETH price falls and the collateral is less than 1.5 times A's original total loan, A must cover the position in time.

Liquidation level: 130%

When ETH price continues to fall and the pledge ratio drops to x1.3, the liquidation mechanism triggers. Polymerization Pool liquidates at the current market price of ETH. After deducting the 8% liquidation fee and repaying the loan to the fund pool, the remaining balance returns to A.

3.9 Polymerization Pool Flow-chart and Technical Advantages

Regular Pledging and Lending
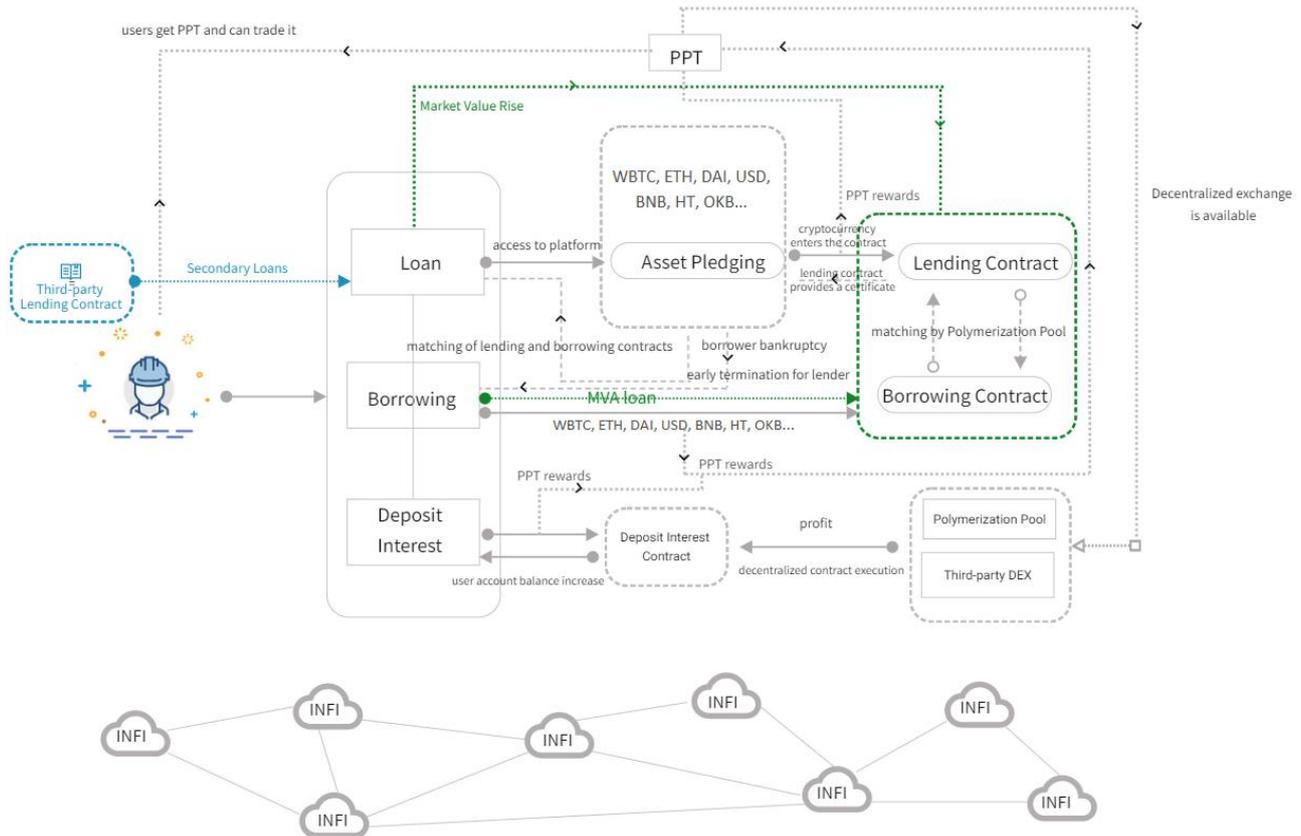
Step 1: vault creation and collateral lock-up

Users need to have a certain amount of cryptocurrency to enter the platform. The platform supports multi-currency lending. InfinityDefi supports transfers from MetaMask, imToken, and other wallets. InfinityDefi is connected to third-party wallets to ensure the smooth use of its products by various users. InfinityDefi is decentralized, therefore, all user funds are guaranteed by contracts to ensure the rights and interests of users.

Step 2: collateral circulation generates PPT

Users can get PPT directly from the InfinityDefi platform when their collateral circulates. Different circulation directions are available directly in the InfinityDefi Protocol for lenders and borrowers with different PPT amounts. Users check the current contract capital flow status of the InfinityDefi platform that releases the number and ratio of PPT generated instantly.

Step 3: collateral redemption, fee payment

When position coverage is not needed, users can redeem the collateral freely. No collateral loss happens. Users only need to pay a small fee: 0.025%. Users do not need to worry about centralization risks because all collateral redemption happens in the contract. InfinityDefi uses open and transparent smart contracts recognized in the industry.

Step 4: collateral takeout

With the InfinityDefi redemption contract, users can transfer the collateral to the wallet address instantly.

Secondary Collateralized Loans
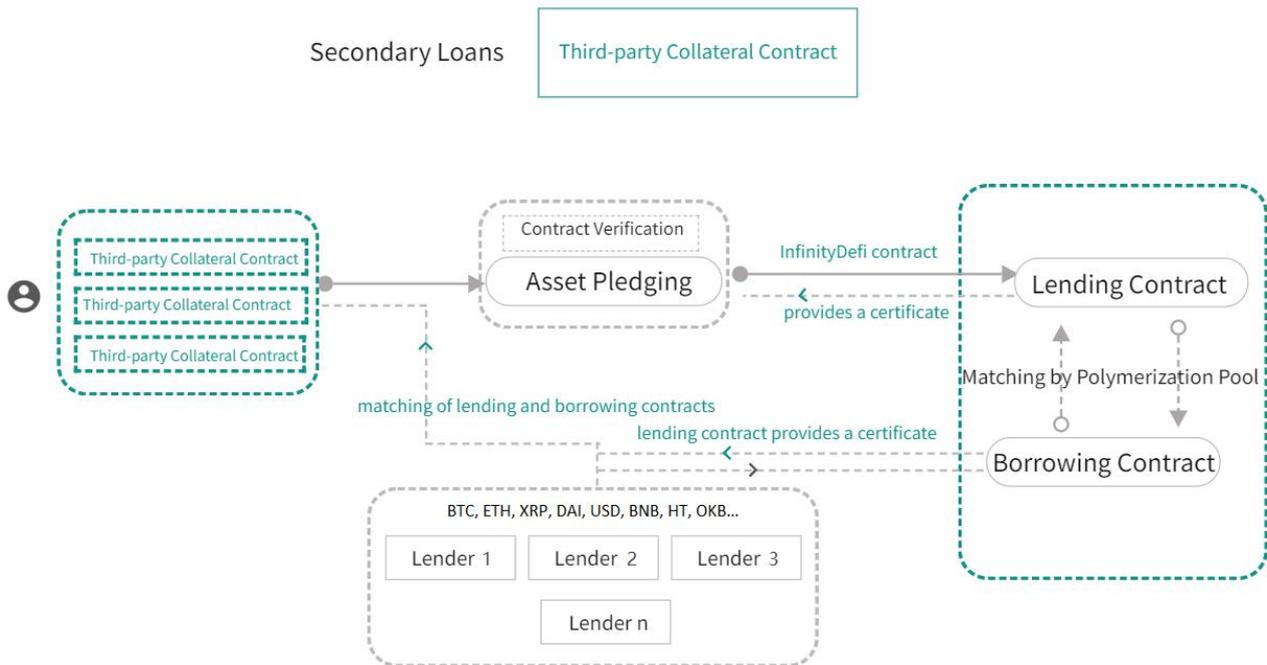
Many DeFi lending projects work in the market. Each one has a different pledge ratio. Following the industry benchmarks, InfinityDefi allows its users to pledge their pledge agreements from other DeFi platforms to get an additional 10% secondary lending line. The model remains within the "collateral + loan" framework, while secondary collateralized loans provide more rights and interests for users.

Step 1: All platforms in the market that are suitable for lending have the corresponding lending contracts. First, users need to transfer their contracts from other platforms to InfinityDefi. Pledge contracts don't need cash-out and can be transferred directly.

Step 2: After a pledge contract reaches InfinityDefi, the platform audits it. The contract mechanism can be viewed directly on the blockchain browser for transparency. InfinityDefi and the user reach consensus and

the contract transfer completes.

Step 3: InfinityDefi platform makes contract records and allows the loan amount increase. The user's new loan amount is recorded in the loan contract. The secondary collateralized loan is issued.

MVA Loans

Whether stablecoins or BTC, ETH, and other cryptocurrencies with large fluctuations, the market value will always have ups and downs. InfinityDefi gives users the optimal amount according to the market price changes. When the collateral amount is within a certain range and the market value of the collateral increases, the pledge contract expands to let users can get a bigger lending line. The contract will

ensure the protection of rights and interests of users. The pledge amount changes in real time along with the market value of collateral.

Step 1: a user transfers a cryptocurrency from a third-party wallet, InfinityDefi accepts the assets for loan allocation and provision of platform tokens. The platform calculates token issue according to the total loan pool size every 24 hours and each user gets an allocation according to its assets on InfinityDefi.

Step 2: InfinityDefi calculates the real-time collateral market price to increase the amount. Users can borrow and lend the pledged assets any time. This is how decentralization embodies in the InfinityDefi lending protocol.

Step 3: The platform has a quota calculation method that exists in the InfinityDefi contract. With the continuous increase of the loan amount, the platform will issue a risk warning. InfinityDefi shall not guarantee the rise and fall of the collateral market price.

3.10 Project Governance

Initial stage: centralized operation and maintenance

In addition to the smart contract infrastructure, the InfinityDefi Protocol requires centralized initiation and maintenance at the initial stage. The founding team of InfinityDefi will set the initial collateral currencies, interest rate calculation method, fee calculation method, collateral and repayment mechanism, Polymerization Pool, Price Oracle, PPT and INFI

generation and termination. Over time, when InfinityDefi usage increases, the team and Foundation will step down from management and completely decentralized community management will start.

INFI holders have all the management rights of InfinityDefi through voting. At the initial stage, the team and Foundation launch the project.

Price Maintenance

In the InfinityDefi Protocol, ecosystem adjustments happen through collateral products, namely the redemption fees and pledge ratio for various types of collateral. With the market changes and the increase of PPT and INFI holders, INFI holders can manage type A, B, C, D, and E products to maintain the long-term ecosystem stability.

Price Oracle

InfinityDefi Protocol needs to know the real-time market price of collateral assets in the Polymerization Pool to trigger the liquidation mechanism. Price Oracle monitors the current exchange rate assets. The protocol aggregates prices from top ten exchanges to set asset values. These values are used to determine the lending capacity, collateral requirements, and all functions that need to calculate account value.

Position Coverage and Liquidation

When InfinityDefi Protocol performs liquidation, it takes out the collateral from the liquidation pool and sells it at the market price.

After paying the liquidation fees and collateral, the repayment surplus

goes to the Polymerization Pool surplus fund. INFI holders vote to determine the surplus distribution method.

Freeze

Freeze is blocking of nodes through voting by INFI holders. It is the last line of defense to protect the governance process and information providers from attacks. Node freeze can block a single price oracle address and trigger the emergency mode.

3.11 Risks and Coping Mechanism

Extreme Price Volatility in the Cryptocurrency Market

From a macro perspective, the cryptocurrency market is still emerging and its liquidity is limited. The inherent features of emerging and developing markets lead to great price fluctuations.

The multi-product portfolio of InfinityDefi makes the project fund pool more stable. INFI helps suppress catastrophic price fluctuations through the users' voting rights. Users can vote on product addition or removal, interest rates, pledge ratio, fees, and emergency Freeze.

Transaction Delay due to Ethereum Congestion

Due to extreme fluctuation of ETH price, DeFi liquidation has seen a dramatic increase. Sellers take up the network, causing serious congestions that lead to position coverage and liquidation.

InfinityDefi's cross-chain free redemption allows users to freely choose the collateral to be redeemed within the fund pool scope. In case of

extreme lack of liquidity and congestion of a product, users can choose other currencies with lower risk to cover positions or redeem.

Malicious Attacks

One of the biggest network safety risks is hacks, system data alteration or stealing.

The primary task of InfinityDefi Protocol is to maintain its own security. InfinityDefi has signed security audit contracts with the top security organizations in the blockchain industry, organized third-party (independent) audits, and has regular debug programs. Users can view protocol audit reports on InfinityDefi's GitHub.

InfinityDefi Foundation reserves a special fund for system security upgrades and modifications.

4 Foundation and Team

4.1 Foundation

At the initial stage, the Foundation manages 15% of the INFI supply (community and market) and initiates activities like marketing, promotion, and security maintenance. After the 15% is fully used, the project becomes fully managed by the community. The PPT transferred to the Foundation can be used for security maintenance and upgrading. The Foundation temporarily controls the following parts of the Protocol:

- PPT allocation principle

- the initial interest rate model for each market and its initial updating

- price mechanism address updating

- token reserve withdrawal

- selection of new administrators

4.2 Team

The goal of the founding team and Foundation is to decentralize the governance of InfinityDefi and share their ideas with third-party technical teams to jointly create the InfinityDefi Protocol.

In the short term, the team and Foundation will work together with community to promote decentralized governance, achieve a sound mechanism, build a solid project foundation, guide community autonomous management, launch voting, and implement emergency

plans. When the project operates well and becomes autonomous, the Foundation will be gradually step down and the team will withdraw from community management.

America:

Technical Advisor Edson Garrido: IT expert, CTO of a famous cryptocurrency exchange in Brazil. Has rich management experience in local technology development in Brazil. As the Technical Director, was responsible for the IT architecture and technology development and management of the largest cryptocurrency exchange in Latin America.

Operating Advisor Bruno Contardi: expert in blockchain business models, a well-known blockchain researcher in the Americas, Distinguished Researcher of the Blockchain Research Institute (BRI) and Inter-Union Department of Statistics and Socio-Economic Studies (DIEESE) (Brazil). Partner of multiple blockchain media and funds.

Economic Model Advisor Marcos Rodrigues: University of São Paulo Economics PhD. Influential figure in the economic research in the Americas. Constructor of economic models for cryptocurrencies.

Advisors in Asia:

Myung-Hwan Rim: Hanyang University (Korea) Economics PhD, Professor of Management Policy for science and technology universities in Korea, Special Research Fellow at the Electronics and Telecommunications Research Institute (ETRI), President of Korea Blockchain Institute (KBCI). Former manager of the Research Planning Section for the Institute of Information Technology Advancement (IITA), former Director of the Technology Policy Research Department for ETRI, managed national research & development programs in Korea. Advisory Committee Member for the Korean Government and public institutions on ICT, R&D strategy, digital content, blockchain, etc. The 13th President and a life member of Korea Society of Information Technology Applications (KITA).

Cheoljoon Kang: Yonsei University (Korea) economics BA, Texas Tech University (USA) economics PhD. Taught international financial markets and derivatives at Korea Banking Institute in 1992—2019. Initiated Jeju International University (JIU) Fintech Management Department, served as its Chairman, developed the curriculum and recruited lecturers. Served as

the Director of JIU Business Development and Management Department. Was appointed the 2nd President of JIU on March 1, 2019. Served as an economist at the Bank of Korea since 1977, worked for the Korean securities and futures industry. A former member of the Presidential Commission on Administrative Reform and the Regulatory Reform Committee. In 2003—2006, served on the Public Fund Evaluation Task Force of the Ministry of Economy and Finance. Served as an independent Director of Board of the Korea Development Bank.

5 Derivatives Ecology Construction

In the future, with the growing user base, InfinityDefi plans to diversify its services for the community.

Multi-stablecoin Index:

InfinityDefi will launch the Multi-stablecoin Index with high stability and resistance to price fluctuations for asset preservation and better profit opportunities for any user in the world. It will support cross-platform integration of TRON, EOS, and Ethereum. We will handpick 70% of mainstream stablecoins and 30% of mainstream cryptocurrencies issued on the above platforms and apply soft 1:1 tethering to USD. The Index is more stable than single stablecoins and has daily volatility of about 1%. Multi-stablecoin Index deals with extreme fluctuations and avoids the functional constraints of separate systems to build a highly stable ecosystem for users.

DEX

The free redemption mechanism of InfinityDefi Protocol backs the exchange functionality. In the future, InfinityDefi will open a safe and stable decentralized cryptocurrency trading platform on its basis. DEX will support transactions with a wide range of assets including fiat currencies, cryptocurrencies, commodities, stocks, and index ETFs.

Liquidity Aggregation Platform

On DEX, InfinityDefi plans to serve various DeFi projects. It will be an

aggregator of profit output data for products where users will be able to get options with the highest profit through data calculation and comparison. INFI will be the governance token of the derivatives platform and the tool to share dividends.

Safety Reserve

For the security of Infinity DeFi Protocol and other DeFi projects, InfinityDefi builds a mutual insurance product to ensure the security of various protocols. INFI holder is responsible for provision of the backing capital. As the core asset to maintain the operation of the insurance system, INFI represents the rights and interests of community members. It allows users to buy insurance, participate in damage claim assessment, assess risks through collateral, and participate in community governance.

By holding INFI, users participate in insurance coverage, initiate insurance for each DeFi protocol, evaluate risks, and express their willingness to underwrite by pledging in smart contracts behind protocols.

Options

Pay INFI as insurance premium to buy the right to sell a certain digital currency at a specified price within a certain period, avoid the risk of price fluctuations and make profit.

Different from all-cash spot collateral of other platforms, InfinityDefi can use the difference in futures prices as collateral, which allows

buyers and sellers to increase collateral before maturity.

The options fee will be included in the options fee pool. INFI holders will have the right to determine the benefit distribution of fee pool.

Convertible Bonds

InfinityDefi's ecosystem token INFI can be converted to equity of the derivatives project according to certain rules. The conversion price, time, and other factors will be determined before the issuance. INIFI conversion is available by dilution of the project equity.

6   Conclusion

InfinityDefi is a protocol on Ethereum and an ERC-20 token.

InfinityDefi Protocol is available through collateralization and is a DeFi product.

Polymerization Pool includes stablecoins and mainstream cryptocurrencies and is relatively stable.

A borrower can become a secondary borrower through secondary collateralization in the InfinityDefi Protocol.

A borrower can pledge the value-added part of its collateral multiple times.

PPT token generates through pledging and lending in the InfinityDefi Protocol. It serves to encourage the generation of collateral and loans and their redemption.

30.5% of INFI generates through exchange with PPT. INFI is used for governance and benefit distribution.