# Introduction



### Figure 1: Main features of TRAVA.FINANCE

TRAVA.FINANCE (or TRAVA) is the world's first decentralized marketplace for cross-chain lending. While existing approaches provide only one or a few lending pools with their own parameters such as borrowing/lending interest rate, liquidity threshold, Loan to Value ratio, or a limited list of exchangeable cryptocurrencies, TRAVA.FINANCE offers a flexible mechanism in which users can create and manage their own lending pools to start a lending business. TRAVA.FINANCE is deployed on the Binance Smart Chain and allows for lending with BSC tokens first; we then enable cross-chain lending with various tokens on Ethereum and other blockchain networks.

The pool owners, who are an additional role to lenders and borrowers, can receive more earnings by devising a good lending strategy for their pools. Moreover, to reduce risks and stimulate lending and borrowing, TRAVA.FINANCE performs cross-chain data analysis on multiple blockchain networks to (i)

recommend optimal pool parameters for pool owners and (ii) detect unusual transactions in their pools. The lending marketplace model of TRAVA.FINANCE will increase crypto liquidity and promote the growth of the DeFi ecosystem. There are six salient features of TRAVA.FINANCE, including:

- **Crypto lending marketplace**: TRAVA.FINANCE creates a **marketplace** in which anyone confident in their abundant capital and profound knowledge of finance is free to create and manage their own lending pools. This multiple-pool model allows pool owners and their pool members to flexibly adapt their investment strategies to the volatility of the crypto market and obtain greater earnings.
- Semantic knowledge graph: TRAVA.FINANCE is built upon the semantic cross-chain knowledge graph. The graph is a distributed ledger that holds the data collected from multiple blockchain networks in the form of entities and their interconnections. The graph allows TRAVA.FINANCE to efficiently search for useful information such as (i) the amount and value of assets exchanged between two wallet addresses; (ii) the provenance of an NFT; (iii) aggregated assets of the same user on multiple networks, etc.
- Data analysis: To reduce lending risks, TRAVA.FINANCE performs statistical data analysis based on the cross-chain knowledge graph and other data sources. TRAVA.FINANCE recommends the optimal parameters for pool owners to create and maintain their own pools (e.g., borrowing-lending interest rate, Loan to Value ratio, liquidation threshold, a minimum credit score of borrowers). TRAVA.FINANCE also assists them in detecting and alerting unusual transactions in their pools.
- Credit score evaluation: Though being an effective tool in lending, credit score has never been used in existing decentralized lending platforms. As a pioneer, TRAVA.FINANCE uses the cross-chain knowledge graph to evaluate credit scores for users and their digital assets. The pool owners thus can (i) reduce the lending risks by defining a credit-score threshold for borrowers participating in the lending pool; and (ii) stimulate borrowing by defining a high Loan to Value ratio for borrowers with high credit scores.
- Cross-chain identification and cross-chain lending: TRAVA.FINANCE uses the cross-chain identification protocol to identify all wallet addresses of the same users on different networks. After that, users can use up all of their cryptos as collateral for a huge loan in a single transaction. This facilitates their borrowing operations and saves them transaction fees. Cross- chain identification also helps them to increase their credit scores.
- NFT, stock tokens, and other digital assets as collaterals: To increase the liquidity of such special assets as NFT, stock tokens, or smart contracts, TRAVA.FINANCE allows users to use all of these asset types as collaterals. Before that, the special digital assets must be priced through auctions. The auction winners are involved in the lending contract. They can either possess the digital asset at a low price or earn considerable amounts from the contract.

# Architecture



Figure 2: TRAVA.FINANCE'S Architecture

TRAVA.FINANCE is divided into two main layers: TRAVA.FINANCE marketplace and TRAVA.FINANCE Foundation. The former uses the protocols and the cross-chain knowledge graph provided by the latter so that end-users can interact with TRAVA.FINANCE marketplace and perform their lending functionalities.

TRAVA.FINANCE marketplace offers three lending roles for end-users. In other approaches, end-users can only participate in the lending business as either borrowers or lenders. In the TRAVA.FINANCE *marketplace*, pool owners may play the additional role for them to start their own lending business and obtain greater earnings. To this end, they create and maintain their own lending pool. TRAVA.FINANCE performs blockchain data analysis to help them adapt optimal pool parameters to their lending strategy.

In order for lenders, borrowers, and pool owners to perform lending business operations, TRAVA.FINANCE develops smart contracts divided into 5 groups: (1) Pool parameter optimization, (2) Cross-chain digital asset evaluation, (3) Credit score evaluation, (4) Digital asset (NFT, stoke token, etc.) auction-based pricing, and (5) Data analysis. These smart contracts are deployed on all nodes in the TRAVA.FINANCE network.

To enable cross-chain lending, *TRAVA.FINANCE* marketplace also includes "Cross-chain Digital Asset Management" smart contracts, which interact with users' digital assets on multiple blockchain networks. The smart contracts allow TRAVA.FINANCE to query users' balance, aggregate their cryptos, or lock their certain amount of cryptos. These cross-chain interactions require a network of validators to participate in to collect, confirm, and verify cross-chain data.

TRAVA.FINANCE marketplace makes use of TRAVA.FINANCE foundation to communicate with other blockchain networks and implement the lending functionalities offered to end-users. TRAVA.FINANCE foundation is built on the hyper-linked datachain protocol. It uses three ToVChain's protocols, including (1) Data exchange protocol to enable interactions between TRAVA.FINANCE and other blockchain networks, (2) Data linking protocol to enrich the cross- chain knowledge graph with linked financial data collected from multiple chains, and (3) Cross- chain identification protocol to identify the same owner of multiple wallet addresses on single or multiple blockchain networks and thus facilitate fast and efficient mortgage placement. TRAVA.FINANCE foundation also uses the cross-chain knowledge graph to perform data analysis and evaluate users' credit scores. The knowledge graph is presented in the next section.

## **Cross-chain Knowledge Graph**





Figure 3: An example of the cross-chain knowledge graph

The knowledge graph is one of the most fundamental components of TRAVA.FINANCE, which is responsible for storing and representing aggregated data from multiple blockchain networks. The graph and TRAVA.FINANCE protocols make independent blockchains interconnected and create the internet of hyper-linked blockchains, allowing DApps to address complex business in reality.

Figure 3 shows an example of the knowledge graph. The circle represents an entity (or instance) of data such as a wallet address, a user, a lending pool, an NFT, or other types of digital assets. Each entity is associated with other entities in certain relationships, represented by directional arrows; the direction of an arrow is the direction of the relationship.

The white rectangles are the values for the data attributes of the entity. The example graph shows that the WalletAddress2 is on the Ethereum network and that address owns an NFT. Aggregated information of the NFT, such as the highest bid price, number of auctions, list of addresses ever owned, etc., are also represented in the knowledge graph.

Let us assume that a user creates one address on the Bitcoin network and one address on the Ethereum network. Because there were no relationships among these addresses, the knowledge graph creates two anonymous users, i.e., AnonymousUser1 and AnonymousUser2. AnonymousUser1 owns the Bitcoin addresses (i.e., WalletAddress3), and AnonymousUser2 has one Ethereum address, i.e., WalletAddress1. Various information related to a wallet address is stored in the graph. For example, the WalletAddress3 entity contains the average balance, the total amount of ETHs transferred in and out, the total number of transactions, or the average, median, mode, and highest number of ETHs transferred in one transaction.

Assuming the user wants to increase his/her credit score or use up all of his/her cryptos as collateral for a loan, he or she can unify all addresses as one via the cross-chain identification protocol performed in only one TRAVA.FINANCE's transaction. After completing the transaction, the two anonymous users are linked by the *sameAs* relationship.

Depending on users' needs, the cross-chain identification protocol also supports linking two wallet address entities by a *guarantee* relationship. Once an address is lost, if all the addresses that guarantee the address confirm the loss, the address status will be claimed as *lost* in the knowledge graph.

Wallet addresses can also be connected by a *transfer* relationship. To ensure scalability, rather than detailed transactions, statistical and aggregated information on transactions is calculated and stored in that *transfer* relationship. As in the knowledge graph example above, several remarkable pieces of information are saved, including *BlockchainAddress1* has transferred 400 ETHs in total to *BlockchainAddress2*; it is performed through 10 transactions, and the largest transaction transfers 200 ETHs.

To avoid junk addresses and junk digital assets, we do not store all blockchain entities in the knowledge graph. The number of transactions or the maximum of cryptos transferred in one transaction related to an NFT or an address needs to surpass a threshold so that the NFT and the address will be added to the knowledge graph. The knowledge graph can also represent other types of entities, relationships, and properties. We develop a unified interface so that the expansion of the knowledge graph can be done in a logical, consistent, effective, scalable, and standardized manner.

As the knowledge graph plays a crucial role, it can only be updated by a TRAVA.FINANCE's validator, and this must be agreed upon by other validators on the network. The knowledge graph needs to be infinitely extended while the assigned number of TRAVA.FINANCEs is fixed and finite. Thus it is not possible to pay fees for updating the graph. However, there should also be a way to encourage validators to update and enrich the knowledge graph. To reconcile this contradiction, TRAVA.FINANCE requires and also encourages validators to update the knowledge graph.

On the one hand, validators must update the knowledge graph regularly, otherwise, they will be stripped of their validator role, and cannot earn rewards for appending new blocks or verifying transactions. On the other hand, each time enriching the knowledge graph, validators will gain the fame score, thereby gaining more priorities and indirectly having the opportunity to earn more TRAVA.FINANCE coins when joining the network.

Priorities may include voting power or the privilege to unlock TRAVA.FINANCE tokens earlier than the standard time when receiving awards. Enriching the graph is a special kind of TRAVA.FINANCE transaction that requires no fee. Out of all transactions, graph-related transactions are extracted and stored separately in files along with their hash value. This allows validators and other nodes to (re)construct the graph more efficiently with their own graph database systems.

# **Cross-chain Identification**





#### Figure 4: Cross-chain identification

The cross-chain identification protocol plays an important role in the TRAVA.FINANCE architecture. It can be used to verify that multiple addresses on different chains belong to the same user. The protocol allows TRAVA.FINANCE to provide an overview of anonymous users, including their total cryptos and other digital assets, statistics for their transactions, and their relationships with other blockchain addresses. These types of information and relationships are stored on the cross-chain knowledge graph. The protocol can (i) improve the credit score of the users and their wallet address so that they can get favorable interest rates, (ii) save them transaction fees since they can use up all of their cryptos as collateral in a single transaction, and (iii) allow them to get their cryptos back when they lose one of their wallet address.

To implement the protocol, we develop a wallet application so that users can manage their accounts and prove their ownership of multiple accounts. The application provides users with two functionalities: *"Add account"* and *"Create a proof of ownership"*. Users can add a new account to the wallet application in multiple ways, e.g., (i) create an account, (ii) import a private key, and (iii) connect to a hardware wallet.

To foster their DeFi transactions, they might need to prove that they are the owner of n addresses. To this end, they can use our wallet application to perform a transaction that activates the cross-chain identification protocol. Receiving the transaction, TRAVA validators check the accuracy of the data associated with the transaction. If the data is valid, the validators accept the transaction and write the **sameAs** relationship among the owners of the addresses to the knowledge graph.

In the following we describe our processing to verify the cross-chain identification of multiple wallet addresses.

#### User side

Assume that a user would like to confirm her ownership for 3 accounts, the wallet creates a message containing 3 data elements, each includes a pair of a *chainld* and a *public key*. Every element has a fixed

size of 41 bytes: 8 bytes for the *chainId* and 33 bytes for the *public key*. The data format is as follows:

- data1 (41 bytes) := chainId1 (8 bytes) + pub1 (33 bytes)
- data2 (41 bytes) := chainId2 (8 bytes) + pub2 (33 bytes)
- data3 (41 bytes) := chainId3 (8 bytes) + pub3 (33 bytes)

The wallet uses the Merkle tree to hash the data and obtains the rootHash (32 bytes)

rootHash := MerkleTree([data1,data2,data3]).getRoot()

The user then uses her 3 private keys to sign on the *rootHash*. Each signing creates a signature, named *si* (64 bytes):

- s1 := Sign(rootHash, prv1)
- s2 := Sign(rootHash, prv2)
- s3 := Sign(rootHash, prv3)

Finally, a transaction is generated and broadcasted to validators. A sample of transaction payload is as follows:

- Type (8 bytes): "SameAs"
- Number (4 bytes): 3 // The number of addresses
- Message (n\*41 bytes): data1 data2 data3
- Signatures (n\*64 bytes): s1 s2 s3
- Timestamp (8 bytes): 1619602364

The total size of a transaction to prove n accounts of the same user is: 20 + n \* 105 bytes

## Validator side

Receiving the transaction, TRAVA validators verify the timestamp and then verify the signatures as follows. They first extract the message {*data1*, ... *datan*} and the list of signatures {*s1*, ... *sn*}. From each data element *datai*, the validators get the *chainId* and the *public key* (i.e., *pubi*). They use the Merkle tree to hash the data and regenerate the *rootHash*:

rootHash := MerkleTree([data1, data2, data3]).getRoot()

The validators then use *pubi* to verify signature *si* on the rootHash:

- verifySignature(rootHash, s1, pub1) => valid/invalid
- verifySignature(rootHash, s2, pub1) => valid/invalid
- verifySignature(rootHash, s3 , pub1) => valid/invalid

Once all signatures are valid, the validators agree that all accounts stored in the message belong to the same user. From n pairs of *chainld* and *public key*, the validators calculate the respective addresses of the user. To eliminate useless addresses, the validators perform additional checks on the age of the address,





# **Credit Score Evaluation**

In the financial sector, a credit score is a value that represents the creditworthiness of an individual; the higher the score, the better a borrower looks to potential lenders. Credit score evaluation is a distinctive technique that differentiates TRAVA.FINANCE and other decentralized lending approaches. TRAVA.FINANCE aggregates and analyzes all transactions of blockchain objects (e.g., user, wallet address, digital asset) on multiple networks. TRAVA.FINANCE then establishes links among them and evaluates their credit score in the most objective and transparent manner.

TRAVA.FINANCE uses credit scores to ensure the safety of the lending process. Pool owners and lenders can rate borrowers' credit and eliminate fraudulent accounts to increase capital efficiency and reduce the risk of bad debt. Based on the credit scores, they can determine the maximum Loan-To-Value ratio for borrowers. Borrowers with high credit scores get preferential treatment; they can borrow cryptos with more favorable interest rates and Loan-To-Value ratios. Credit scores provide an incentive for users to (i) hold their wallet addresses as long as possible and keep them clean, (ii) perform the cross-chain identification protocol to interlink their addresses, (iii) perform more transactions inside and outside TRAVA.FINANCE, and so on. This increases crypto liquidity and fosters the growth of the DeFi system.

The credit score evaluation in TRAVA.FINANCE is primarily based on on-chain data. At present, we collect, enrich, and analyze Binance Smart Chain transactions, including the native transferring transactions and the transactions to deposit, withdraw, repay, and borrow tokens generated from Binance Smart Chain lending DApps.

TRAVA.FINANCE evaluates credit scores for both wallet addresses and other digital assets. Wallet addresses operated for a long time with good transaction history (e.g., an address that has transactions with many other addresses, always pays debts on time, and performs transactions frequently) will have a high credit score. Pool owners can use credit scores as a criterion to select competent wallet addresses for their pool's liquidity providers.

The credit rating of digital assets helps pool owners and liquid providers to minimize liquidity risk. TRAVA.FINANCE divides digital assets into two categories: Tokens/coins and other digital assets (e.g., NFT, smart contracts, stoke tokens) and evaluates their credit scores. The credit score of a **Token** is assessed based on 4 parameters, i.e., (i) the token price, (ii) the market cap (MC) of the token, (iii) the token trading volume, and (iv) the number of transactions related to the token. High-credit-score tokens have a great advantage over low-credit-score tokens. Once being used as collaterals, they offer high loanto-value ratios to borrowers; lenders also get favorable lending interest rates with their high-credit-score tokens. Users can improve their credit scores once they possess those high-valuable digital assets.

TRAVA.FINANCE also performs credit ratings for other **digital assets such as NFT**. The credit scores for NFTs are estimated based on the number of times that they have been auctioned on TRAVA.FINANCE or other trusted platforms. NFTs' scores should not depend on their price because their price is typically determined in an unreliable manner, based on the emotion and the preference of customers.

To evaluate credit scores for a wallet address, TRAVA.FINANCE credit scoring model will take into account the following factors:

- Total asset. The total asset represents the financial strength of the wallet address; it is the most
  intuitive and easiest-to-evaluate parameter. It is also the second most important parameter that
  affects credit scores. The total asset is the sum of balance and total investment minus total liabilities.
  The credit score of the address is proportional to its total asset. As this parameter is a volatility index,
  the credit score is calculated based on both the average total asset in a certain period and the total
  current asset.
- Transaction history. Transaction history is the most important parameter; it has a major impact on credit scores. TRAVA.FINANCE collects and aggregates all exchanges, loans, deposits, and other transactions of the wallet address across multiple DApps to calculate various intermediate parameters such as (i) the age of the address, (ii) its transaction amount, (iii) its frequency of transaction, (iv) its number of liquidations and (v) its total value of liquidations.
- Loan ratios. Loan ratios (debt ratios) represent the debt position of the account. It is divided into two sub-parameters, i.e., loan-to-balance ratio and loan-to-investment ratio.
- *Circulating assets*. This parameter represents how active users are in the crypto market. The more money they invest in the crypto market, the more creditworthiness they gain from others. This parameter is evaluated based on 2 sub-parameters, (i) investment-to-total-asset ratio and (ii) ROE (Return on equity).
- Trustworthiness of possessing assets. The last parameter for credit rating is the trustworthiness of the assets owned by the wallet address. The wallet can improve its credit score by possessing highvalue and trustworthy digital assets. At present, TRAVA.FINANCE evaluates two types of digital assets only (i.e, Token and NFT).

# **Collateralized NFTs**

NFT has become an increasingly popular way to buy and sell digital artwork. They are non-fungible, which naturally means that they are illiquid. Bringing liquidity to the NFT space would unlock a myriad of possibilities. As of May 2021, there have been no lending projects that make use of NFT as collaterals, because unlike a fungible currency or common stock, NFT value is difficult to determine. TRAVA.FINANCE adds more flexibility to the illiquid world of NFT and allows NFT owners to earn an ROI without selling it.

TRAVA.FINANCE offers an innovative feature that prices NFTs based on auctions. After the auction, borrowers can use their NFTs as collateral. TRAVA.FINANCE auction mechanism is divided into two modes: auction-to-sell and auction-for-buy-right. The difference between two modes is the ownership of the digital asset after the auction. In the auction-to-sell mode, as soon as the auction ends and the auction winner pays the fee, he/she will immediately receive the auctioned NFT. Meanwhile, in the auction-for-buy-right mode, the winner cannot immediately buy the digital asset. After a certain amount of time specified in the auction, if the NFT owners cannot repay the loan, the auction winner can buy it at a low price. Otherwise, they get a considerable interest if the NFT owners repay the loan and get their NFT back.

The auction process is as follows:

- 1. The NFT owner opens an auction session; she sets (i) the legal crypto used in the auction, (ii) the initial price for her NFT, (iii) the countdown time for the auction session, (iv) the mode for her auction (i.e., *auction-to-sell or auction-for-buy-right*), and other auction terms.
- 2. TRAVA.FINANCE users, who are interested in the NFT, can join in the auction session. To encourage users to participate in auctions, at the end of the auction, TRAVA.FINANCE randomly selects several bidders and rewards them with TRAVA tokens extracted from the auction fees. To guarantee that the bidders make their payment when they win the auction, TRAVA.FINANCE locks a number of their TRAVA tokens as soon as they join in the auction session and make a bid. When the auction finishes, they will immediately get their tokens back if they are not the winner. In case they are the winners, they can get their tokens back only if they pay for the auctioning NFT before the deadline.
- 3. In the *auction-to-sell* mode, the auction winner will pay the owner the whole auction price to get the NFT.
- 4. In the *auction-for-buy-right* mode, the auction winners have to pay a part of the auction price. We name the quotient of the amount the winners have to pay over the auction price "*auction-paid ratio*". The auction-paid ratio is calculated from the creditworthiness of the lender, borrower, NFT, and the auction terms.

The NFT owners can use the cryptos paid by the auction winner as collateral for their loans. Once they repay their loan including the interest to the auction winners, they can get the NFT back. Otherwise, they will lose their NFT to the auction winners. These rules are all defined in the auction smart contract.

TRAVA.FINANCE provides benefits for all participants as described below.

- NFT owners can determine their NFT value based on the bid prices given by the auction participants. The value can be much greater than their initial expectation. They can either directly sell their NFT or use their NFT as collateral and earn profit without losing it. TRAVA.FINANCE thus increases the liquidity of NFTs and opens up a unique and exciting NFTFi marketplace.
- Based on the given number of auction bids, **bidders** have a corresponding chance to win the reward at the end of the auction session. This rewarding mechanism provides incentives for users to actively make a bid in the auction.
- Auction winners can get their desired NFT at a price lower than their bidding price (once NFT owners cannot repay the loan) or they can receive considerable interest from their loan to NFT owners (once NFT owners repay the loans and get their NFT back).
- The credit scores of NFT owners, auction winners, bidders, and NFTs can be improved after auctions.

The auction mechanism for NFT can also be applied to any type of digital asset. In our road map, TRAVA.FINANCE will implement this auction feature for various types of digital assets (e.g., stock token, smart contract).

# **Tokenomics**



Figure 5: TRAVA Token Overview

The native digital cryptographically-secured fungible token of TRAVA.FINANCE (Trava token) is a transferable representation of attributed governance and utility functions specified in the protocol/code of TRAVA.FINANCE, and which is designed to be used solely as an interoperable utility token on the platform. Trava token is issued based on Binance Smart Chain's BEP20 standard.

Trava token is a functional utility token which will be used as the medium of exchange between participants on TRAVA.FINANCE in a decentralised manner. The goal of introducing Trava token is to provide a convenient and secure mode of payment and settlement between participants who interact within the ecosystem on TRAVA.FINANCE, and it is not, and not intended to be, a medium of exchange accepted by the public (or a section of the public) as payment for goods or services or for the discharge of a debt; nor is it designed or intended to be used by any person as payment for any goods or services whatsoever that are not exclusively provided by the issuer. Trava token does not in any way represent any shareholding, participation, right, title, or interest in the Company, the Distributor, their respective affiliates, or any other company, enterprise or undertaking, nor will Trava token entitle token holders to any promise of fees, dividends, revenue, profits or investment returns, and are not intended to constitute securities in Singapore or any relevant jurisdiction. Trava token may only be utilised on TRAVA.FINANCE, and ownership of Trava token carries no rights, express or implied, other than the right to use Trava token as a means to enable usage of and interaction within TRAVA.FINANCE.

Trava also provides the economic incentives which will be distributed to encourage users to contribute to and participate in the ecosystem on TRAVA.FINANCE, thereby creating a mutually beneficial system where every participant is fairly compensated for its efforts. Trava token is an integral and indispensable part of TRAVA.FINANCE, because without Trava token, there would be no incentive for users to expend resources to participate in activities or provide services for the benefit of the entire ecosystem on TRAVA.FINANCE. Given that additional Trava token will be awarded to a user based only on its actual

usage, activity and contribution on TRAVA.FINANCE and/or proportionate to the frequency and volume of transactions, users of TRAVA.FINANCE and/or holders of Trava token which did not actively participate will not receive any Trava token incentives.

Trava token is used in 4 main areas: (1) Reward (2) Collateral & Lending (3) Payment (4) Staking:

- 1. **Reward:** To incentivise users to provide liquidity to pools, pool owners can set up rewards paid in TRAVA token.
- 2. Collateral and lending: TRAVA tokens may be used as the basic collateral for loans and mortgages.
- 3. **Payment for lending fees:** As the native platform currency, TRAVA tokens may be used to pay for lending fees in TRAVA.FINANCE pools.
- 4. **Payment for pool management:** As the native platform currency, TRAVA tokens may be used by pool owners to pay for pool management by TRAVA.FINANCE.
- 5. **Payment for auction deposits:** In the NFT auction process, TRAVA tokens can be used as the deposit for purchase transactions.
- 6. **Payment for auction organization:** The NFT's owners (auction organizers) may pay for auction fees with TRAVA tokens.
- 7. **Staking for a validator:** The data stored on the knowledge graph chain must be verified by validators. As an indication of commitment and service standard assurance, validators would be required to put up an amount of Trava token as a security deposit (i.e. a "stake") before being entitled to participate in the ecosystem. Where validators commit offences (e.g. incorrect information, unacceptable downtime, or other malicious acts), this stake may be slashed.
- 8. **Staking to participate in the governance process:** The Trava token would allow holders to create and vote on on-chain governance proposals to determine future features of TRAVA.FINANCE, with voting weight calculated in proportion to the tokens staked (the right to vote is restricted solely to voting on features of TRAVA.FINANCE; it does not entitle Trava token holders to vote on the operation and management of the Company, its affiliates, or their assets or the disposition of such assets to token holders, or select the board of directors of these entities, or determine the development direction of these entities, does not constitute any equity interest in any of these entities or any collective investment scheme; the arrangement is not intended to be any form of joint venture or partnership).

### **Token Allocation**

Total Supply – Capped at 5,000,000,000 TRAVA

We distribute tokenomics with a long-term vision and sustainability for the project. As a DEFI community lending solution, Trava reserves the most tokens (40%) for Liquidity Mining.

Trava believes that Marketing is one of the important criteria for business development. The tokenomics for it will be used to help expand Trava's awareness, position our products and services, and boost customer acquisition.

The foundation & team play an important role in Trava.Finance's long-term and sustainable development plan. They will support the company's operations, future partnerships and other corporate business requirements.

The remaining components are distributed with the goal of ensuring fairness to investors, enhancing the attractiveness of the project, and developing successful products. Liquidity Mining– 40.0%, Marketing– 22.0%, Foundation– 20%, Listing– 2.0%, Team– 10%, Advisors– 6.0%.

### Circulating supply

TRAVA.FINANCE tokenomics highlight a strong commitment and focus for the long term development. The token release schedule is extended until 2026, with a release curve designed to avoid supply shocks and make the release of tokens gradual over time.





**TRAVA Token Supply**