finance.vote

Democratising DeFi

17/11/2020

Whitepaper

Version 1.0

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Introduction

The cryptospace is a proving ground for genuinely new democratic models. With the emergence of the decentralised finance (DeFi) movement, new and radical ways of reaching consensus and coordinating around money are being created with rapid open innovation.

Although early DeFi applications have been active since 2017, it is the emergence of governance tokens that has caused explosive growth in the DeFi space. They are the mechanism by which true decentralisation can be achieved, pushing trust away from contract creators and onto token holders.

They are however, largely flawed in their implementation. Highly asymmetric token distributions, voter apathy[1] and huge gaps between the technical knowledge of core teams and token holders creates a context where genuine governance is surface level at best and thinly veiled centralisation at worst.[2]

As a plethora of new tokens enter the market, it becomes increasingly difficult to keep up with new technological developments, but also separate out quality projects from low quality clones, or outright scams. Market signalling is a primary economic cost in the cryptospace and finance.vote will allow users and entrepreneurs to identify the impact of their signalling activity as well as provide early access to market signals.

finance.vote is a decentralised application for reaching consensus across the cryptospace[3] as a whole. It provides a space for users to engage with market discovery on new and existing tokens and be incentivised to share their perception on future price action.

Finance.vote has three cryptoeconomic components:

- Prediction and Market Discovery.
- Second Layer Governance.
- Decentralised Social Trading.

1 "Blockchain Voter Apathy. Governance is a key area of ...." 29 Mar. 2019, https://medium.com/wave-financial/blockchain-voter-apathy-69a1570e2af3. Accessed 26 Aug. 2020.
2 "Deconstructing 'Decentralization': Exploring the Core Claim of ...." 13 Feb. 2019, https://www.ssrn.com/abstract=3326244. Accessed 26 Aug. 2020.
3 "A signaling theory model of cryptocurrency issuance and value." https://ethresear.ch/t/a-signaling-theory-model-of-cryptocurrency-issuance-and-value/1081. Accessed 26 Aug. 2020.

Prediction and Market Discovery

Prediction and Market Discovery

Turning Degens into Alpha

Problem:

- The perennial explosion of altcoins produces some winners and mostly losers.
- The permissionless of Uniswap and other DEXs creates vast, rapidly evolving and noisy markets.
- Early signals on the potential of token value are dominated by a small number of influencers with ulterior motives[4].

DAOs and prediction market dynamics demonstrate huge potential as tools for improving large scale decision making and governance systems[5]. However, broad spectrum prediction market systems such as Augur, although maturing, have yet to find meaningful adoption[6]. Largely, this is due to the open ended parameter space in which predictions can be made, which dilutes liquidity and interest across the markets. finance.vote lenses focus and adoption into a small number of shared vote markets, with constant and far more immediate settlement. Liquidity issues are resolved through the finance.vote token economics, which distributes a small amount of token inflation into reward pools, which seeds liquidity for every vote.

Using the semantic ballot voting system, users are presented with the ability to vote on the future market success (or failure) of tokens from across the cryptospace. This allows users to make market bets across multiple tokens, all contained in a single transaction.

$FVT rewards are claimed from reward pools by users who are correct in their predictions. This causes a progressive aggregation of voting power to those who can consistently make accurate market predictions, chaining prediction market decisions through reputation factors.

As adoption increases, a range of voting markets will be introduced through the finance.vote governance system, which will allow users to accrue reputation in the system based on their ability to accurately predict verifiable on-chain market metrics.

4 "Cryptocurrency Scam As Crypto Influencers Tweet About ...." 15 Jul. 2020, https://www.forbes.com/sites/rogerhuang/2020/07/15/likely-cryptocurrency-scam-as-crypto-exchanges-and-influencers-tweet-about-cryptoforhealth/. Accessed 26 Aug. 2020.

5 "DAOs, Democracy and Governance - Ralph Merkle." 31 May. 2016, https://merkle.com/papers/DAOdemocracyDraft.pdf. Accessed 26 Aug. 2020.

6 "Augur Price Analysis- Project matures but user numbers still low." 7 May. 2019, https://bravenewcoin.com/insights/augur-price-analysis-project-matures-but-user-numbers-still-low. Accessed 26 Aug. 2020.

Semantic Ballot Voting

Semantic Ballot Voting is a new kind of voting system designed specifically for finance.vote. It utilises a stack of semantic tags (in this case token tickers for tradable cryptocurrencies) and quadratic voting[7].

Users are presented with a market ordered list and are requested to use their vote power tokens ($V) to vote on the cryptocurrencies of their choice. They convert $V into votes, by quadratic voting:

$Votes^2 = \$V$ cost

Meaning that every subsequent vote has a non-linear cost.

This system enforces prioritisation and ensures that users cannot vote strongly on every item, an issue that decreases validity in conventional voting and surveying systems. This scheme is used repeatedly throughout the finance.vote ecosystem and helps build weighted consensus across the whole network.

7 "Quadratic Voting: How Mechanism Design Can ... - SSRN." 13 Feb. 2012, https://www.ssrn.com/abstract=2003531. Accessed 26 Aug. 2020.

Digital Identity Tokens

Digital identity is a crucial component of voting technology. It is particularly important in quadratic voting systems, where if it is trivially easy to create multiple identities, then the quadratic system trends back towards being a linear system and honest actors are left at a disadvantage.

The act of creating multiple identities with the intent of corrupting a system is known as a Sybil attack. This is an issue globally across many social systems including most legacy social media systems, such as Twitter and Facebook. Since it is obvious that narratives can be manipulated by controlling the frequency of certain hashtags, the incentives exist to manipulate social consensus through Sybil attacks. It's the Sybil War.

In this increasingly adversarial context, all applications in the future will require a degree of Sybil resistance. This is typically obtained, mostly ineffectively, by collecting some piece of identifying information, such as a phone number, or more aggressively, state issued identity documentation. In permissionless systems, this is an unacceptable solution.

Finance.vote utilises a novel system we call Decentralised Identity Tokens (DITs). These take the form of ERC721 compatible NFTs, which represent an identity within the system. Users will not be able to vote in the system without one and cryptoeconomic dynamics are used to prevent the trivial creation of identities.

Decentralised Identity

The DITs in the finance.vote ecosystem contain the following information:

- The voting history of the identity.
- The reputation of the identity, denoted in voting power $V.
- An adoption metric, denoted by a number i.e. $FVT1 to $FVTn, where n is the issuance number.
- Metadata allowing customisation of the DIT look and feel.

A default skin for users' will be generated in the Obelisk phase from procedurally generated art, producing a one of a kind artwork for each DIT. Certain numbers will have increased significance.

Identity Customisation

The finance.vote digital identity tokens start as an NFT that simply contains users voting histories and therefore performance within the market. In the Obelisk phase of the network these will gain their own procedurally generated provably unique digital art. However, they are customisable to users preference and are intended to be used as avatars in the system.

Users will be able to link their DIT with other NFTs they have purchased from a marketplace or from auction.vote, showcasing their art choices to other users on the platform.

If you can't beat them, join them

In the finance.vote ecosystem, Sybil resistance takes the form of ensuring that users cannot corrupt the consensus outcome by splitting votes across multiple ballots and fabricating multiple identities. In reality, this cannot be entirely stopped.

We therefore take an economic, pay-to-sybil mitigation approach, to reach a state where good intelligence on the number of Sybils in the system is known. Before a user can engage in voting activity on finance.vote, users must acquire a minimum of 100 $FVT, which will be sent to the identity minting address and burnt, which assigns voting rights to a user Ethereum address. Only addresses, where a DIT is present will be able to vote, addresses with multiple DITs will be able to vote multiple times.

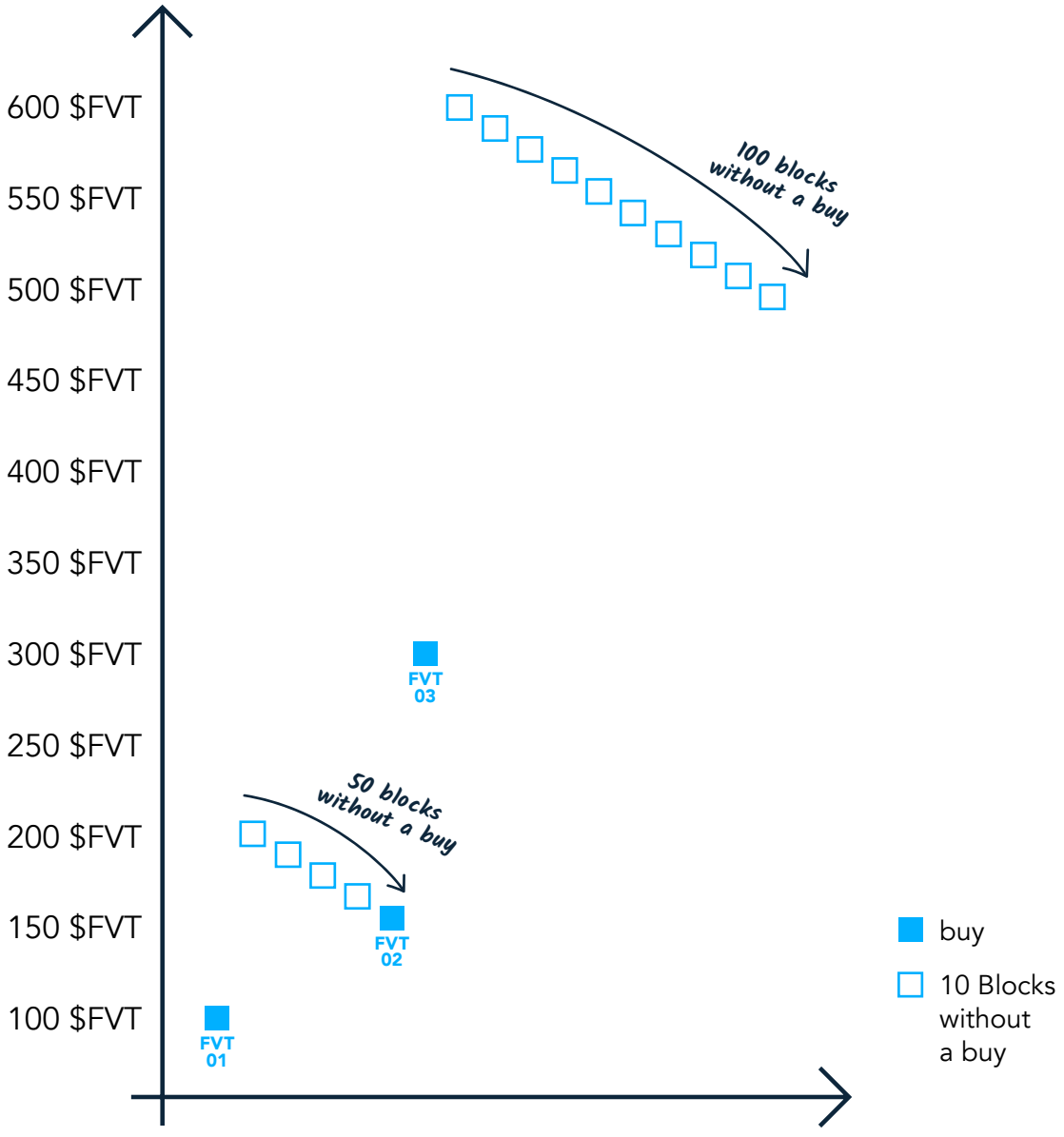
A Cryptoeconomic Line of Defence

Using a similar mechanism to that found in the auction.vote system, the price of DIT will increase exponentially based on demand. If a user buys an identity for 100 $FVT the price will double to 200 $FVT for the block immediately after the buy. This price will then decay at a rate of 1 $FVT per block until it reaches the price floor of 100 $FVT, unless a subsequent buy occurs at a price delta between 200 $FVT and the price floor.

All $FVT is burned on identity creation, ensuring that token holders benefit from adoption and Sybil activity.

An example buy sequence:

- The first user in the system purchases, FVT1 for 100 $FVT.
- Over the period of 100 blocks the price returns to 100 $FVT.
- FVT2 is bought for 150 $FVT and the price in the next block jumps to 300 $FVT, where the same user immediately purchases FVT3.
- The price is now 600 $FVT for an identity and users wait until the price decays until their perceived value of a DIT is reached.



Tradability

finance.vote DITs will be tradable as are any other NFTs. Therefore, it is possible that users may be able to accrue reputation and therefore vote power on an identity and then realise that work and skill into a profit from their initial purchasing price.

Users may also wish to trade identities for their aesthetic or perceived value based on their issuance number; lucky numbers are very real to some.

Decentralised Reputation

Identities within the system are designed to allow users to accrue reputation based on their ability to make effective market predictions and influence consensus formation in the second layer governance system.

These dynamics are difficult to Sybil. The nature of our chained voting system ensures that progressively correct accounts earn greater reputation and voting power over time and the likelihood that a user can successfully construct these accounts randomly as opposed to playing honestly diminishes over time.

Summary

Many presume that Sybil resistance can only be obtained through the use of hard identity solutions. We propose that pseudo-anonymous identity formation can occur in decentralised systems through the use of non-fungible tokens. We believe this will be an important piece in the evolution of DeFi and decentralised identity.

Vote Markets

Introduction

The finance.vote network leads with a quadratic voting based prediction market system we call “vote markets”.

The system is designed as a crypto economic game that marries governance with the markets. It is designed to aggregate collective intelligence from a distributed group of pseudo-anonymous crypto users who have their finger on the pulse of the crypto market.

Quadratic voting is used to generate a consensus in a perceived future market order. This is done by presenting each user with a token list that is by default ordered by the market. Users then spend a budget of vote power to create a new order, based on their perception of token quality and future potential market performance.

The resultant aggregation of user ordered token lists creates a distribution of perceived market order in the form of a consensus list.

At this point in the future, users are rewarded with a proportional share of a network generated reward pool depending on the proportionality of their correctness.

This simple mechanic becomes exponentially more powerful as new and diverse markets are added and as the power of the rules of the game is transitioned to token holders.

The purpose of this game is to create an adversarial environment to release and battle test our quadratic voting technology, including our decentralized identity token system so that it can be used to aggregate and curate collective intelligence and reach effective decisions in our second layer governance system.

The vote markets have the following properties:

One Sided

Prediction markets are limited by adoption and liquidity. Similar to the issues seen with long tail assets such as those found in emerging altcoin markets, when liquidity is thin price discovery becomes difficult.

Prediction markets turn predictions into tradable assets. This is potentially profoundly disruptive and has the potential to create futarchy based DAO governance structures in the future. However, the fidelity of predictions are contingent on the number of players in the game and further, the depth of their order books.
AMMs have opened up the long tail asset space by ensuring that there is always a trade

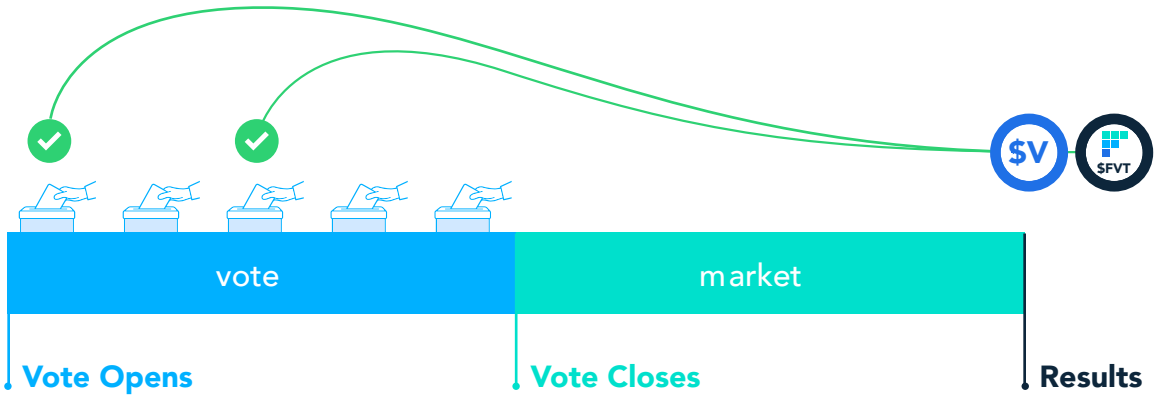
available at a given price through algorithmic price discovery mechanisms. The pay off is slippage. They are one sided markets, a smart contract becomes the counter party.

The finance.vote vote markets use a similar design philosophy by seeding liquidity using a reward pool system. Your counterparty is the network, rather than a trader. The result is a collective reward pool that is distributed programmatically to winning votes.

In the same way that uniswap has eliminated order books from token trading, we eliminate order books from prediction systems.

A Vote / Market Window

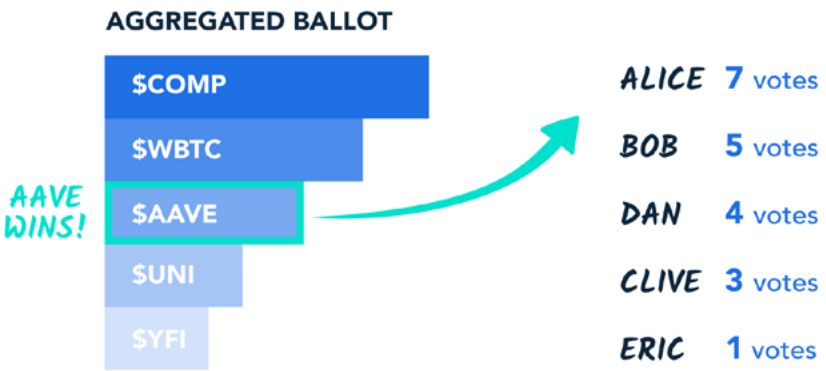
Each vote market comprises two time bounded windows, a vote window and a market window. In the vote window, users have a period of time to submit their votes, signalling their preferred market ordering, when this window closes, the market window opens. Here, no more votes are submittable and the predictions of voting users play out in the market. At the closing block of the market window, typically weekly at UTC market close, a snapshot of the top gaining token, is determined by a market oracle and is compared against the consensus state.

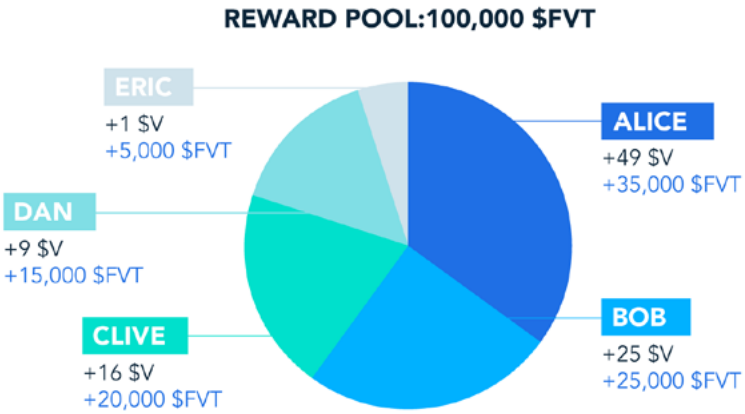


Token Rewards

In the opening state of the system the reward pool is best conceptualised as an incentive for effective research. The cost of entry is the purchase of a decentralised identity token and the gas costs required to submit an on-chain vote utilising the vote market smart contracts.

The user vote pool share is allocated as follows[8]:

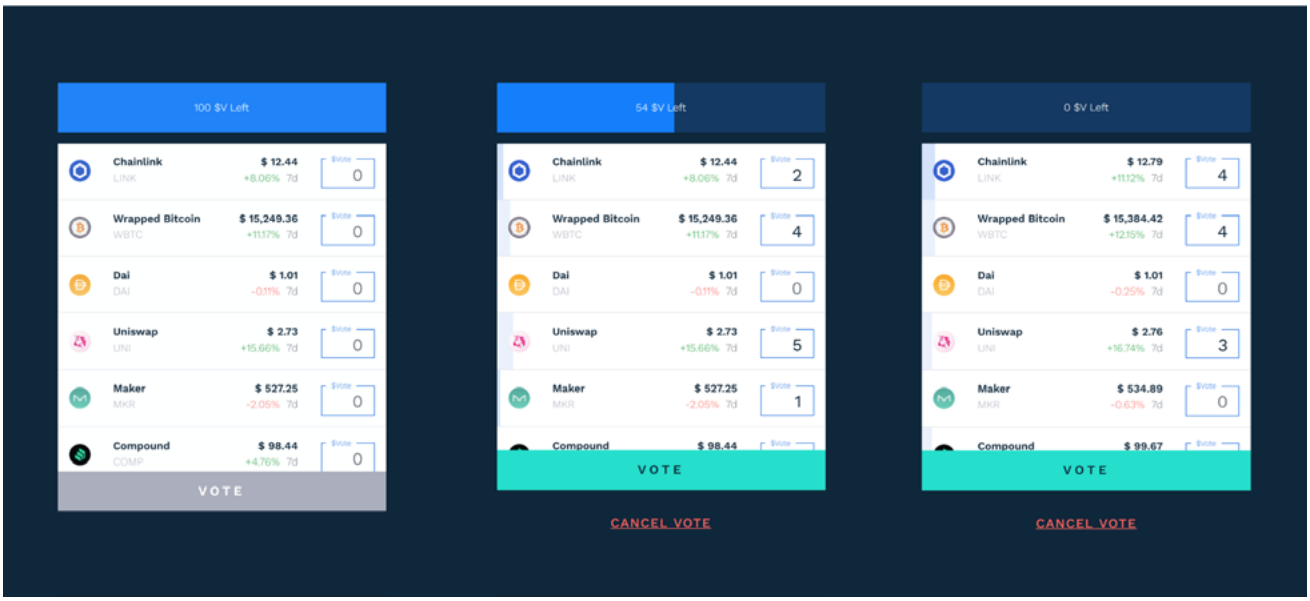




8 Note that this is computed as votes, not $V, which are votes^2, whereas the $V bonus is equal to the $V spent on the winning ticket.

Quadratic Voting

Quadratic voting first proposed by Glen Weyl and Eric Posner[9] is a voting paradigm that is designed to allow users to vote more than once on a particular issue, moving beyond the 1 person, 1 vote (1p1v) paradigm conventional in most democratic systems. Instead, voters are allowed to buy more votes. The cost being that the more subsequent votes that are bought, the greater the cost by the square of the votes. This allows users, particularly those with minority views points to express their preference with more intensity than would be possible in a 1p1v system.



Meritocratic Reputation System

In our initial markets, users can amplify their vote power beyond the starting level by demonstrating a history of correct decision making in the markets, or by purchasing more identities.

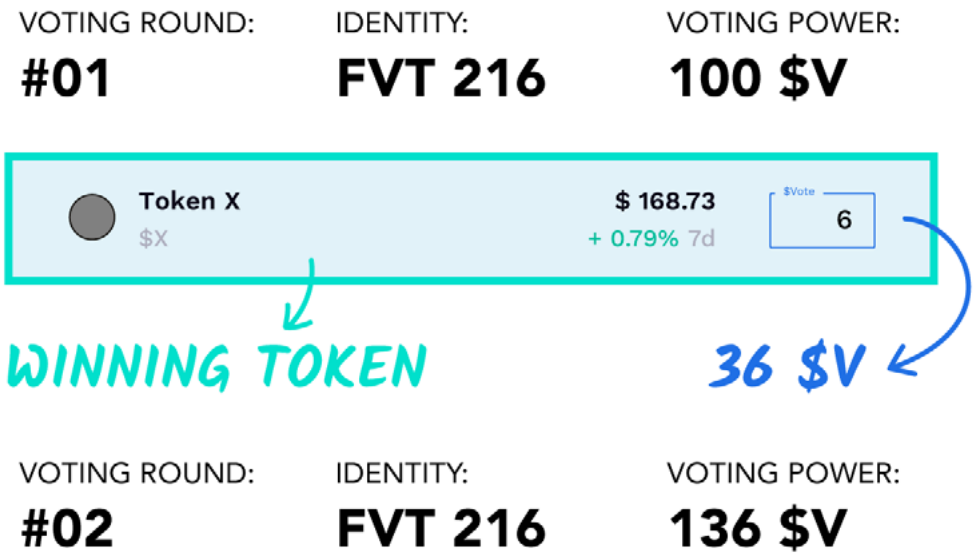
Vote power in the system is denoted by the use of an internal vote power token $V. Every identity is airdropped a budget of vote power tokens to spend in each vote market, in every voting window, we call this "Power UBI".

Each user starts with a Power UBI of 100, giving them 100 $V to spend on votes in a vote market. The base UBI level for each identity increases based on their history of correctness.

9 "Voting Squared: Quadratic Voting in Democratic Politics" by ...." https://scholarship.law.vanderbilt.edu/vlr/vol68/iss2/3/. Accessed 17 Nov. 2020.

For example, if a user votes on $TokenX 6 times in a “Winner” vote market and $TokenX is the highest gaining token at the end of the market window. Then that identity has spent 36 $V on a winning prediction and will therefore receive a 136 $V Power UBI from that point on. There is no reduction in this user’s UBI after this point. The reputation system is built on non-punitive, positive reinforcement only.

This ensures that over time vote power balances and therefore sizes of claim on the reward pool will trend towards users with a history of correctness in the markets.



Minimal Cost of Entry

Engaging in early altcoin markets is the best way to gain high risk / reward trades. It is also the best way to get rekt. With a heavy bias towards the latter.

finance.vote offers users the opportunity to make market bets on the altcoin markets without purchasing and holding the hyper volatile underlying assets. Once users hold a voting identity they get a free bet in every vote market on the finance.vote network, outside of the network costs of submitting the bet.

In subsequent vote market releases it will be possible to stake $FVT to increase exposure to these bets, however in our early phases users will win shares in the reward pool and gain vote power without the requirement to stake capital.

It is not necessarily the case that those with the most wealth, hold the most knowledge. We use our semantic ballot voting system to aggregate knowledge from a distributed group of crypto users and aim to strip out the plutocratic influence that wealth has on the market, creating a microcosmic merit-based market environment.

A Gamified School of Decentralised Finance

The vote markets allow users to engage with the market in a lower risk and downside protected environment, where they can hone their trading skills and build fundamental knowledge about the cryptospace.

finance.vote identity holders will gain access to educational material that aims to boost users' understanding of the decentralised technologies of the future. It is in the interest of the network to amplify the collective intelligence of its user base and this will take place at first in existing social media platforms and then on our second layer governance system, which will be a consensus curated dialogue and decision framework optimised for this purpose.

Price Discovery

It is an existing paradigm in the cryptospace and indeed the wider market system to price productive enterprise relatively against one another. Is Microsoft better than Google? Is Aave better than Compound? Our vote market system asks this question consistently, cyclically and with a reputation system that ensures that market intelligence is rewarded for these activities.

Market capitalization and other metrics are a poor indicator of quality in the cryptospace, especially as token economics and inflationary dynamics in the token systems often lead to wildly inaccurate initial pricing of tokens.

It is our intention that the vote market system generates alpha based on the fundamental value proposition of tokens in the crypto economy.

The Vote Market Roadmap

The vote market concept is vast in scope. We roadmap a number of vote markets as network leaders, however it is intended that the token holders and the DMF take over the responsibility of generating new vote market concepts in the future.

Launch Market - DeFi (Winner)

Our launch market is aimed at where the action is, the DeFi market.

DeFi is the most rapidly growing and changing market on the planet. Innovation occurs at lightning speed and some products, the "DeFi Blue Chips", can ship new contracts with great frequency, shifting fundamentals dramatically.

This is the perfect context for testing the efficacy of the vote markets as an alpha generating system.

DeFi (Loser)

Just as DeFi products can ship new game changing contracts that add new decentralised financial primitives to the market. They can just as easily be compromised through an exploit resulting in the loss of user funds.

These first two markets will be the capstone vote markets for the system.

DeFi Vote Markets - Initial Token List Curation

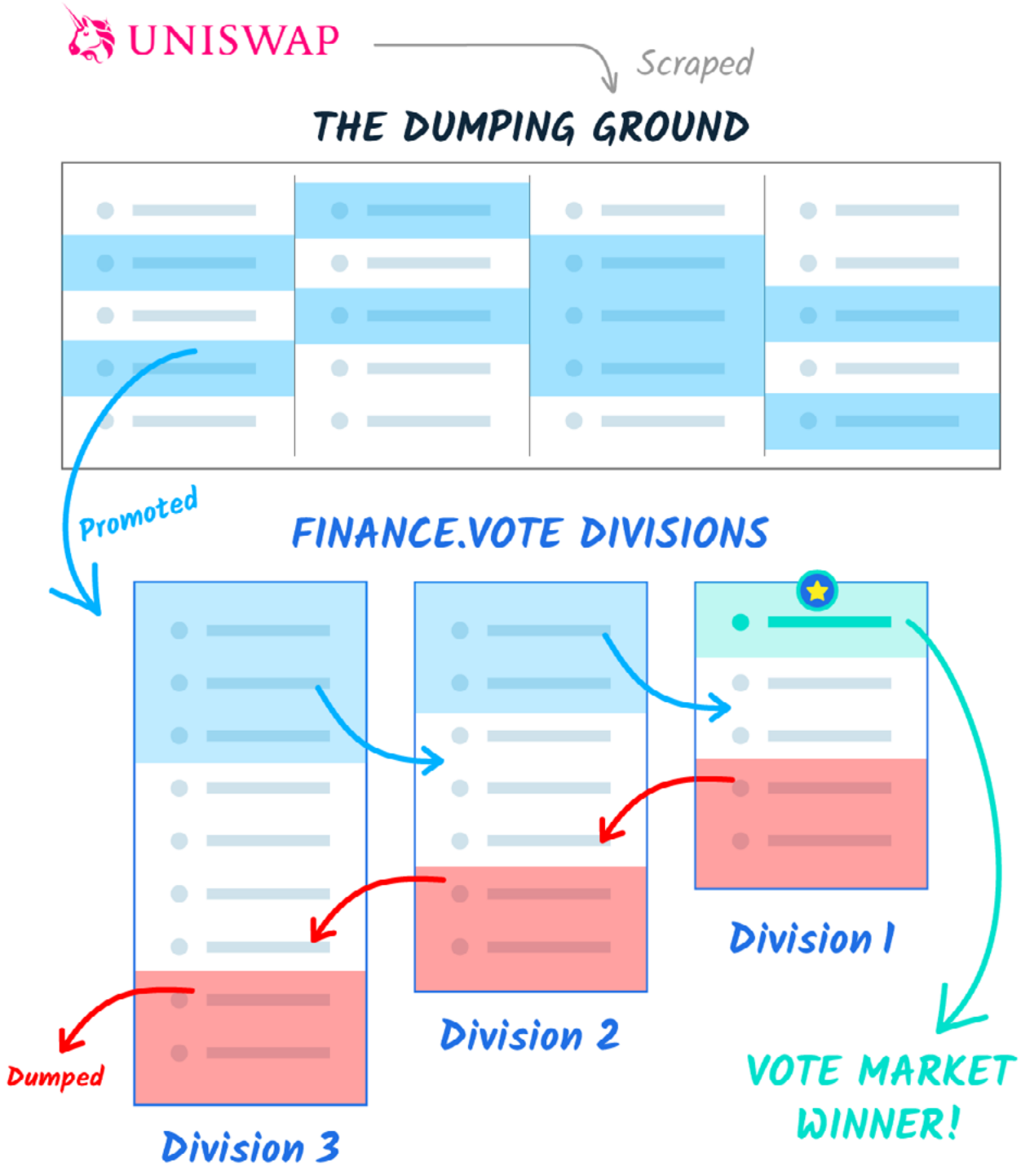
We begin by using the top ten tokens from the CMC DeFi token list.

This list will be modified through deliberation on our social media channels and a rolling snapshot vote (in advance of our second layer governance system) will be held to determine token list inclusion. A maximum of one token per week will be added to the DeFi token list until a fully automated process is completed.

New Tokens

A vast amount of new tokens are listed every day across the decentralised exchange ecosystem. The outstanding majority of these tokens are valueless, or outright attempts to scam users of the cryptospace.

The "New Tokens" vote markets will be designed to utilise the collective intelligence of the finance.vote user base to filter these tokens through a successive iterative league table system.



New tokens will be indiscriminately scraped from the uniswap contract ecosystem into a token list called “The Dumping Ground.” A top slice of these tokens will be added to the finance.vote division system.

In the division system. A nested layer of leagues will be used to to filter tokens via promotion and demotion until they hit the top of the division one vote market. These winning tokens will graduate to more senior markets, such as the DeFi Winner market.

Thematic Token Lists

As our token curation system matures, a proposal system will be introduced that allows users to compile thematic token lists related to tokens aligning to specific technological affordances e.g. Layer 2 tokens, Privacy Tokens, Classic Alts etc.

REKT

The REKT market is a vote market based on predictions of token blow up.
This vote market will run until one of the tokens in the token list experiences a 90% drawdown in price from the initial market snapshot.

This market will be utilised to detect crowd perception of stablecoin blow up risk, with a basket of tokens that span a range of market maturity. Which projects are most likely to be exploited? Which projects are likely to experience a governance attack, or catastrophic governance failure? Which are under existential threat?

It is the goal of the Rekt market to collect this intelligence.

Experts

The “experts” vote market is for pre-release tokens.
In this market, a group of experts are invited to take part in a vote and will be attributed special “Expert” voting rights.

The experts will quiz token creators on their proposed future projects and the experts will vote with their identities to generate a collective expert vote. Simultaneously, users will vote with their identities, aiming to predict the outcome of the expert vote.

The experts become the ‘oracle’ in this system and the vote market is settled on their vote.

The outcome of this vote launches the successful token immediately in a liquidity bootstrapping event on auction.vote.

Memes

Meme markets, the most difficult market of all. The generation of high fidelity meme voting will be highly complex and contested. Achieving this will require advanced blockchain governance.

Staking

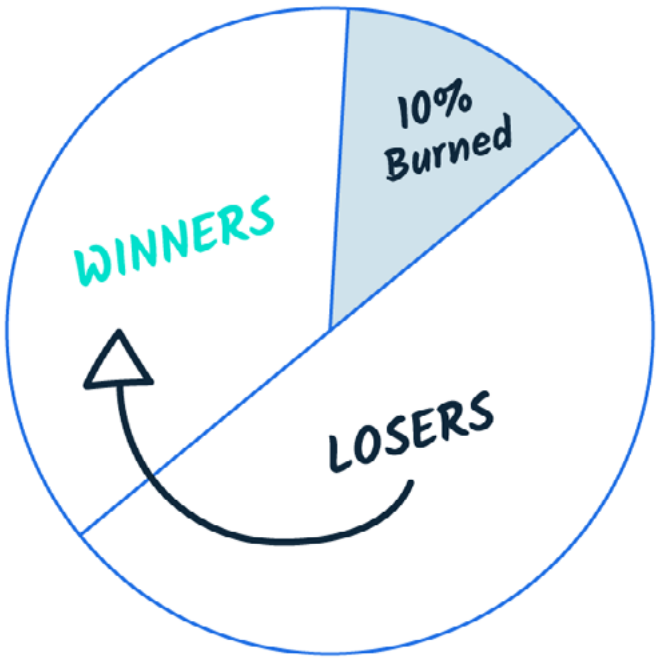
The vote markets will not stay as merely as a collective intelligence and consensus tool.

More effective price discovery will arise from those with skin in the game. For those users who wish to increase their exposure to these market bets, a staking system will be released that will allow users to stake $FVT on the market prediction outcomes.

Architecturally, the staking system will be a different layer from the voting system reward pool.

Our first staking system will allow staking $FVT on an identity for a single round of a single vote market. This identity may or may not belong to the staker, therefore this will be the foundation of social trading, betting on an identity that does not belong to you.

In this formulation, every (round, tournament) pair will have a collection of stakes, up to a maximum of one for every identity. The set of identities for which there are non-empty stakes will essentially be in competition with each other, with the total $FVT stake getting redistributed among the various stakes in proportion to how their identity voted on the correct outcome. In this game, the losers pay the winners.



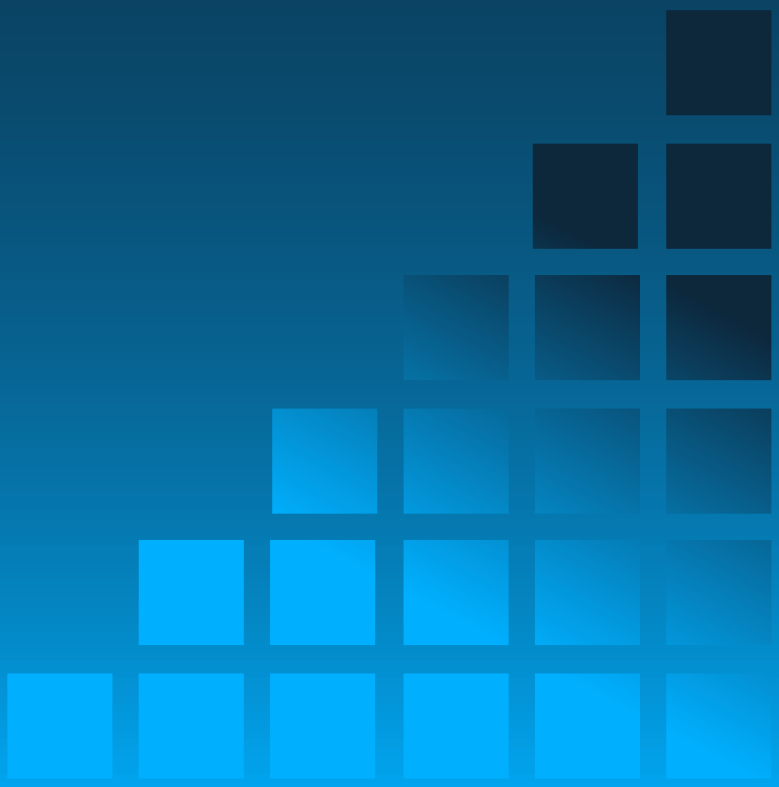
For example, suppose there are 3 identities, Alice, Bob and Caroline, and they vote on the winning choice with votes 1, 3 and 0, respectively. Suppose further that the stakes on Alice, Bob and Caroline are staking 10, 20 and 30 $FVT, respectively.

Then once the winner is announced, the total stake on that round (10 + 20 + 30 = 60 $FVT) would be distributed proportionally to the stakes, with 1 / (1 + 3 + 0) = 1 / 4 of the 60 = 15 going to the stake for Alice and 3 / (1 + 3 + 0) = 3 / 4 of the 60 = 45 going to the stake for Bob, and 0 going to the stake for Caroline. In this situation, the stake for Alice will have started at 10 and ended at 15, a 50% gain, and the stake for Bob will have started at 20 and moved to 45, a 125% gain. In essence, the losing bets are reflowed to the winners. Natural selection is beautiful.

10% of the losing stake will be burned in each round.

The staking system is still in the design phase, however is targeted for release in the Obelisk phase of the network. It will allow fair staking of multiple coins simultaneously, a first in both the cryptospace and the wider financial system, as far as we are aware.

Second Layer Governance



Second Layer Governance

Bringing Politics to DeFi

Problem

- Many established networks lack any formal governance mechanism to receive accurate signals from their token holders regarding the future direction of the network.
- Loose and chaotic social signalling systems, such as Telegram and Reddit are ineffective for reaching consensus, are prone to spam and are an inconvenience for teams.
- DeFi DAOs are often heavily gated and cornered by asymmetric token issuances, meaning that users have no meaningful influence on the network.
- Permissionless systems allow projects to be easily cloned and users can be duped into buying fake tokens or engaging with projects that are outright scams[10].

Introduction

Governance is what allows you to get things done as a collective. It is the process of making decisions about decisions. It is the act of generating effective processes that allow people to organise at scale and move towards a productive outcome. It is the reason why we have the modern civilisation that we have today, allowing us to form coherent social self-organised structures that churn out innovation and productivity. And now we are doing it on the internet.

It can not be underestimated how important this transition is. Typically, the power to organise and work towards a productive outcome has taken place within the confines of institutions, organisations and firms, but now humans are coalescing in digital spaces and forming movements. They are not very productive yet and typically fall prey to the tyranny of structurelessness, but with blockchain based governance systems that could change.

10 "Fake Tokens Continue to Plague Uniswap - Cointelegraph." 19 Aug. 2020, https://cointelegraph.com/news/fake-tokens-continue-to-plague-uniswap. Accessed 26 Aug. 2020.

The missing piece for decentralised global organisations is voting technology. Outside of the confines of institutional governance, there is no control of the narrative. No way to keep conversation on track towards a common goal. The establishment of norms within a group becomes tricky, as self-interested parties, consciously or otherwise, drag discourse towards their own goals. What they are missing is a means to reach consensus.

The finance.vote second layer governance system uses the construction of decentralised financial systems to experiment with ways to use voting technologies to experiment with social consensus formation.

Hierarchical Governance

Governance at the protocol layer is a hotly contested narrative across the cryptospace[11]. Cryptonetworks require consistency, transparency and incredibly high levels of security and this does not lend itself to particularly agile governance structures. Some networks have attempted to innovate beyond this and in many cases it has led to corruption[12], collusion[13] and sometimes outright failure[14] of the tokens resulting in permanent loss of funds.

More recently, Decentralised Autonomous Organisations (DAOs) have become increasingly prominent in emerging crypto networks, especially in the DeFi space. They can allow substantial changes to take place, pivoting to new contracts and shifting monetary policy in ways that can have a large impact on token holders. They are risky and should be used sparingly.

We propose a multi-level hierarchical approach to governance, which separates high stakes reality altering decisions to a highly secure, scope limited "layer one DAO". Thus, leaving the full gamut of decision making formation arising from dialogue and rough consensus formation to layer two miniDAOs.

11 "Against on-chain governance. Refuting (and rebuking) Fred ...." 30 Nov. 2017, https://medium.com/@Vlad_Zamfir/against-on-chain-governance-a4ceacd040ca. Accessed 26 Aug. 2020.
12 "Tron's Takeover of Steemit Is Internet History Repeating Itself ...." 5 Mar. 2020, https://www.coindesk.com/trons-takeover-of-steemit-is-internet-history-repeating-itself. Accessed 26 Aug. 2020.
13 "Leak reveals collusion on EOS blockchain - The Block." 1 Oct. 2018, https://www.theblockcrypto.com/linked/1015/leak-reveals-collusion-on-eos-blockchain. Accessed 26 Aug. 2020.
14 "YAM Finance Crashes Over 90%, Founder Admits His Failure." 13 Aug. 2020, https://cryptopotato.com/yam-finance-crashes-over-90-founder-admits-his-failure/. Accessed 26 Aug. 2020.

Lobbying and Social Consensus Formation

Up until now, DAOs have been poor places to engage in complex decision making. Typically, they are substantially gated, requiring sometimes exceptionally high token stakes to demonstrate any meaningful voice[15].

The finance.vote second layer governance system is designed to allow social signals to form, be amplified and captured in token specific miniDAOs. These systems will demonstrate the first use of the semantic ballot voting system outside of asset price discovery. Here, the system will be turned towards dialogue, content curation and decision making.

It is the intention of this system to provide a space that users can reach consensus on what it is that they desire their chosen networks to focus on and move towards. It will be a space to share research, build knowledge and reach shared meaning.

Our semantic ballot voting system will utilise quadratic voting to build decentralised curation processes. Decisions and proposals that receive sufficient consensus will be able to transition to the layer one DAO, the DMF for consideration.

miniDAOs

The second layer governance system is built to convert rough consensus and dialogue into actionable decisions in both the layer one DAOs of the finance.vote.

With the integration of semantic ballot voting, miniDAOs are dialogic spaces driven by cryptoeconomics. Users will be able to create their own votes, vote on discussion topics and curate ideas and sources.

The key to these spaces is content sorting. Users will utilise voting tools, that are live and battle tested in the adversarial environment of our vote markets. Finance.vote therefore sits in the governance space in between the extremes of high-stakes, on-chain governance and the loose social consensus formation in channels such as Reddit and Telegram.

15 The Compound governance token ($COMP) requires 1% of the total token supply delegation to submit a proposal, currently valued at $16.7m. https://compound.finance/docs/governance#introduction

Blockchain Agnostic

As a governance system in the emerging DeFi space, blockchain interoperability is paramount.

Finance.vote will begin life on the Ethereum platform and will always have Ethereum based components, however, our second layer governance system will have several forked development trajectories across a range of blockchains; the miniDAOs is where these development trajectories are realised.

In order to bootstrap and showcase the second layer governance system, the finance.vote launch team commit to deploying the following miniDAOs:

- The $FVT miniDAO: Ethereum based.
- A $BTC miniDAO: Bitcoin based.
- One other; TBC

This launch set of miniDAOs will be deployed during the Pyramid phase of the network. After this point, new miniDAOs will be released in tranches to blockchains who wish to spin up a decision making structure using network infrastructure. These miniDAO slots will be auctioned as DITs via the auction.vote system and development for them will be funded by the DMF treasury.

Scalable voting

The gas limitations in our vote markets are a fundamental component in their cryptoeconomics. These network costs imply a base economic value for the $FVT economy. If users are willing to pay these fees in order to obtain $FVT, then $FVT has some value delta above that base cost.

However, in our second layer governance system we want dialogue; curated on-chain chatter. This needs to be as cost effective as possible, but maintain the necessary degrees of sybil resistance to keep these space spam free and the voting systems effective.

Consequently, we hereby open a funded multi-year research project to develop scalable voting systems for deployment in our miniDAOs. This will include the formation of private voting solutions, whereby user identity can be selectively disclosed based on user choice.

The most high volume vote markets will be set up as “bake off” environments to test the latest on-chain scalability solutions, with the explicit focus of voting technology.

Plutocracy

1 coin, 1 vote systems (1c1v), perhaps inevitably, trend towards extreme plutocracy.

Highly uneven distribution of tokens are a feature of all token economies up to this point and this creates a significant issue in governance systems, as wealth turns from merely economic power, to coordinative power.

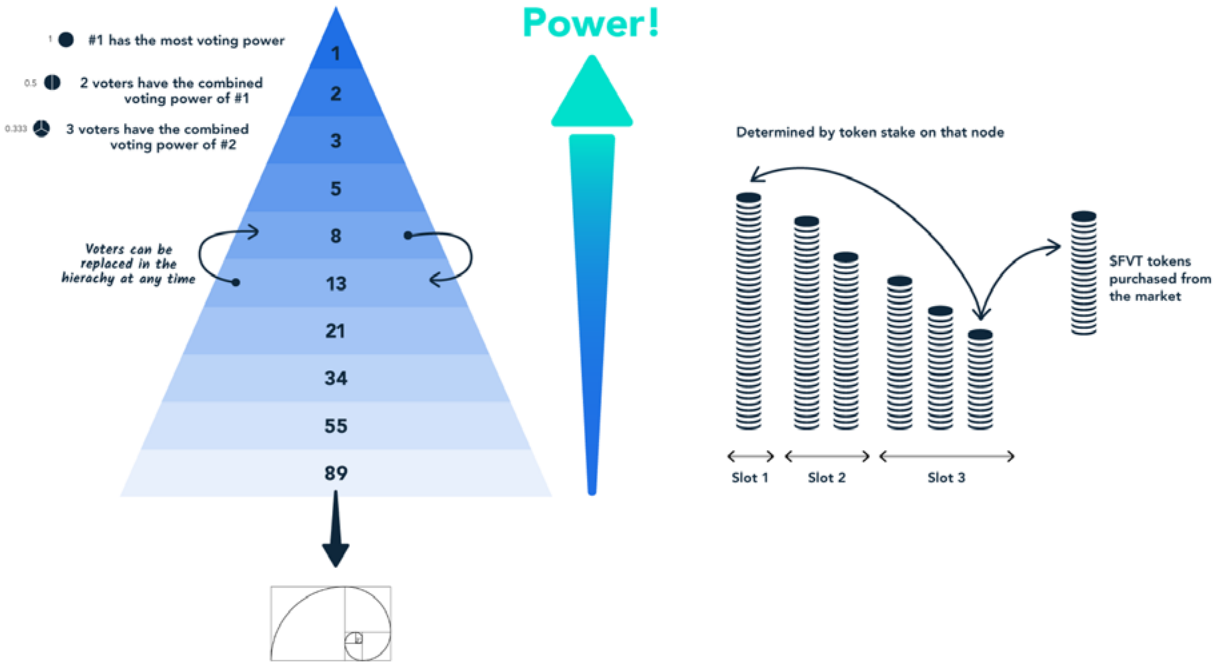
A central tenet of the finance.vote network is to explore mechanisms that break this direct correlation between wealth and power.

This is done though the use of the identity linked vote power system, which in the vote markets is generated through meritocratic means. This alone, will generate a separation between token holdings and influence within the system and our main decision making architecture will include both a wealth based and meritocracy based dynamics.

This dynamic is extended and nuanced in the second layer governance system, which utilises the .vote consensus system and the introduction of tuneable token stake mechanics that are cross-chain and blockchain specific.

The .vote consensus mechanism

The .vote consensus mechanism is the means through which token stake is used to weight voting power in each of the miniDAOs in the finance.vote ecosystem. It utilises a pyramidic stacking mechanism to normalise vote power across a voting population, ensuring that large token holders do not have an extremely out weighted voice in the system.



Users are stacked in layers into staking slots according to the Fibonacci sequence. This status dynamic ensures that token holders can utilise their wealth to increase their influence, but not so unduly that they dominate the system to the point of corruption. The interplay between users' $V balance will ensure that vote power is optimised to avoid plutocracy.

A single user with the highest token stake will have the highest weighted voice in that miniDAO. Token balances thereafter determine which tier of the consensus mechanism that they sit within. Each tier has a number of staking slots, which are populated by users based on their staked token balances. Each tier has the same staking power, but is shared between a greater number of people. The tiers scale in slot size out to infinity.

For example, a user with 100,000 $FVT tokens staked on the $FVT miniDAO has the highest stake on that node. The next nearest token balances are 95,000, 90,000 and 80,000. The 95,000 and the 90,000 stakers occupy the second staking tier and the 80,000 staker takes the third slot along with two others. The 100,000 staker has 1,000 $V and the 95,000 and 90,000 stakers have 500 $V, and next tier down have 333 $V and so on.

This mechanism incentivises users to purchase $FVT to stake in their chosen miniDAOs to raise their influence in the social consensus formation process, but mitigates plutocratic power formation.

Summary

In summary, the finance.vote second layer governance system is an adaptive pseudo-hierarchical DAO architecture that uses voting technology to experiment with new forms of human coordination.

Decentralised Social Trading

Decentralised Social Trading

Trade with your enemies

Problems

- Although the cryptospace is trending towards being more collaborative, with pooled liquidity becoming the norm, how this is distributed to users will become fraught with governance complexity.

- There is currently nowhere to collaboratively trade and share market signals trustlessly within decentralised exchange space.

The finance.vote social trading system evolves out of the vote markets, into a gamified social trading system.

The digital identity tokens utilised in the vote markets, earn reputation and therefore a rank in the system.

This will allow status systems to be generated such as social league tables, whereby NFT identities can be displayed in a list in accordance with their performance in the various vote markets.

Identity Staking

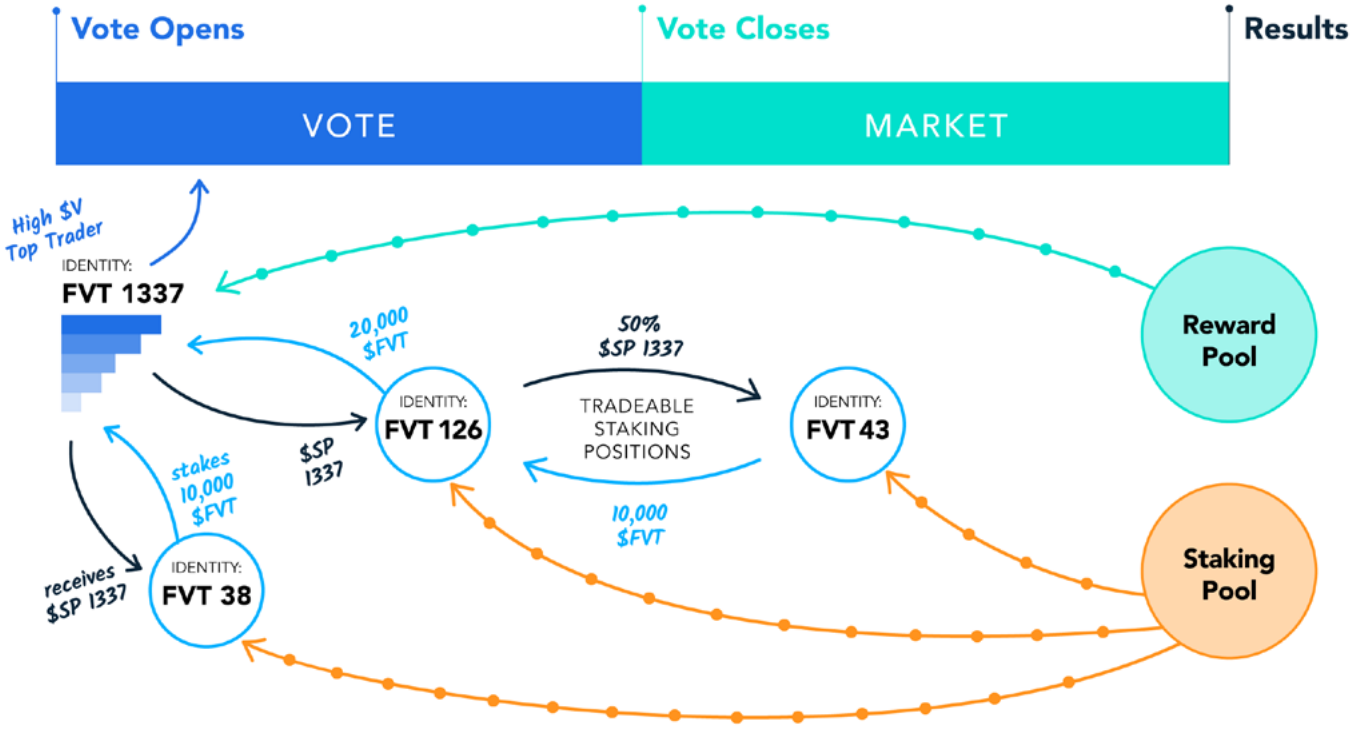
Our social trading system begins by allowing quadratic votes made by an identity to be tokenised. This will allow users to accrue reputation through effective market predictions and allow other users to stake $FVT on their identity. Staking users will win, if that identity wins, with the host identity earning 10% of the profits.

Staking positions take the form of ERC20 tokens ($SP tokens) that represent a stake position on a quadratic vote associated with a particular identity.

For example: 10 $FVT1SP tokens, will represent a share in the staking pool that is won by the $FVT1 identity based on their market bet.

Adding and removing $FVT to a stake will be allowed until voting stops, after which $SP tokens will be tradable on the secondary market until the bet is settled.

This mechanism allows users to take delegated hedged market bets against other staking participants in our vote markets. They are decentralised quadratic options generated by users with a history of market performance.



Micro Liquidity Pools

Pro users will be able to create their own vote markets and design their own token lists.

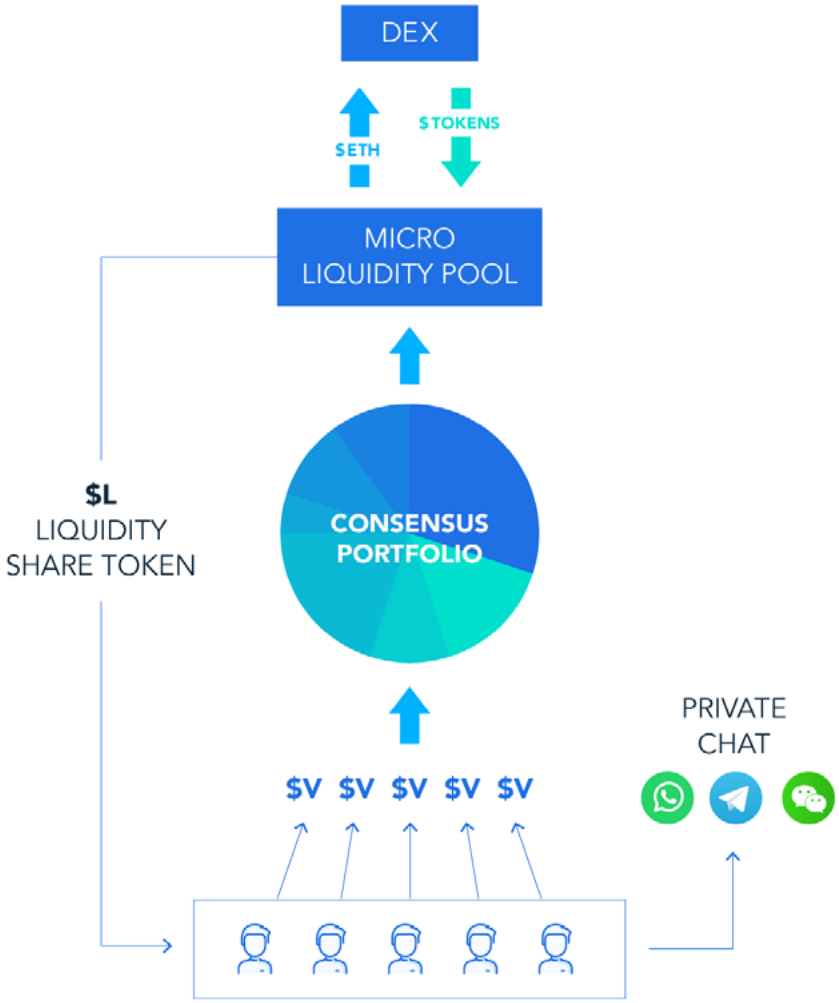
Private vote markets will be mintable with special DITs, that give permission to call a single vote market minting event. These special identity tokens will be auctioned periodically on auction.vote.

Once minted, these DITs will be able to issue identities to participants in their own chat groups or preferred social media bubbles.

Now, a group of decentralised users will be able to trustlessly pool assets and create a dynamic micro liquidity pool of digital assets that can be rebalanced via quadratic voting based consensus.

Users will hold LP tokens representing their stake in the micro liquidity pool and will be able to withdraw at any time after round resolution.

We anticipate that recruitment drives will occur for private pools, where high quality traders are invited to groups to share their alpha in exchange for a share in pooled liquidity winnings.



Gated Competitions

Special periodic vote markets will be created that will only allow identities with a threshold rank to enter.

For example, a "Pro" vote market is held where users with over 500 $V balances can enter. There are a limited number of voting slots, and the vote market contract only allows 100 identities to enter.

After this, a voting window is held on a governance determined token list and players play and stakers stake on their chosen identities.

Summary

The finance.vote social trading system introduces a gamified market environment with a human element. Users obtain status within the system and are ranked based on their market performance. More passive market actors can stake their capital on identities that have a proven history of performance in the market. Positions on those identities are tradable in market windows in advance of market settlement.

Governance

Governance

The finance.vote governance architecture is intended to introduce a new paradigm of governance into the cryptospace, utilising both a layer one DAO, the Decentralized Monetary Fund (DMF) and the Layer two $FVT miniDAO in a bicameral governance structure.

From early in the launch, users will be given the opportunity to materially shape the future of the network and progressively, layer one powers will be transitioned in their entirety to the token holders. $FVT will act as the governance token for the network alongside it's incentive generating base utility properties as a cryptocurrency.

The Decentralised Monetary Fund (DMF)

The DMF will build a novel DAO pattern optimised for control of the finance.vote monetary policy to the token holders. The DMF sets the inflation rate by creating new reward pools and initiating new voting markets. It also controls the ecosystem development fund, which will add full transparency to the assets designed to maximise the impact of finance.vote ecosystem within the crypto community.

The $FVT MiniDAO

The $FVT MiniDAO will showcase the potential of second layer governance by developing the finance.vote ecosystem in partnership with the users. A series of feature votes will be launched, early in the Pyramid phase, which will allow users to vote on future tournaments and reward pool sizing. The $FVT MiniDAO is where policy is debated prior to ratification and material shifts in direction of the system occur.

The Path to Decentralisation

The finance.vote network leads with an ethos of maximal decentralisation. That is, we aim to disintermediate key network functionality throughout a phased deployment of the network, retaining control only where it is absolutely necessary.

The network will be a permissionless system, creating an inclusive space where ideas can be negotiated and digital asset price discovery can take place through decentralised voting techniques.

The network is deployed in a three phase path towards decentralisation.

Obelisk (From network genesis)

This is the launch phase of the network during which a number of key components of the system are introduced to the users, including auction.vote and the vote markets.

It will not be possible from the outset to build these complex human interface features, without some degrees of centralisation.

In this phase a number of management keys exist that can, through human input, modify the rules of the game in such a way that they can be optimised for adoption based on feedback from the community.

For example, in the pre-TGE phase. Digital Identity Tokens will be issued via management key to engaged community members for the purposes of bootstrapping adoption.

Once the $FVT token is available, this process will be replaced by a purely permissionless perpetual auction system, whereby users burn $FVT to obtain DITs. This simple example cryptoeconomic disintermediation directly demonstrates the efficacy of utility tokens for facilitating decentralisation.

Throughout this phase, we create and optimise adversarial cryptoeconomic games that will stress test the permissionless governance structures of the network.

These include our voting technology, which utilises quadratic voting and therefore requires a sybil protection layer created by our identity system. Again, this will be tuned by human input, but once a clear parameter space for this component has been identified, it will transition to token holder vote.

The voting system in this phase is turned towards the markets in an attempt to understand the context in which the network is launched. The launch team will use the data produced by this to build tools and infrastructure for education and collective intelligence building. Informed consensus is a progressive long term process and it will be a responsibility of the network launch team to support in community understanding and knowledge building.

Throughout this phase the voting and auction systems will be optimised using our management keys so that we arrive at tunable parameters that can be transitioned to the main DAO, the DMF in phase 2. The launch team will aim to utilise a transformational leadership style, with a view towards showcasing effective practices for network maintenance and responding dynamically to token holder feedback. Our network culture is one of radical openness[16].

16 "10 defining principles of radical openness - UNHCR Innovation." 28 Jul. 2016, https://www.unhcr.org/innovation/radical-openness/. Accessed 17 Nov. 2020.

Pyramid (Begins 6 months post genesis, end Q2 2021)

In this phase we launch our second layer governance system, which aims to further empower the community with decision making capability on the network.

In this phase, control of key system parameters are transitioned to the DMF and at an appropriate time the vote market management keys will be burned.

In this phase we use quadratic voting to turn dialogue into numbers.

Here we aggregate rough consensus so that it can be lensed into coherent decision making. This is a complex iterated process that will begin in this phase and will become a foundational paradigm of the network.
We do this in token specific miniDAOs. These are platforms where network level discussion is curated so that clear signals can be generated from the community.

Here social self organisation is promoted so that new system parameters and functionality can be discovered. In this phase, the finance.vote network core team are still in service to the users and will design, develop and deploy core technologies for the network and will expand the community of developers and users through the use of the DMF treasury.

Throughout the pyramid phase, the finance.vote reputation system will be tuned to ensure that a healthy mix of stake weighted and meritocratic consensus formation is used for key decision making. The system will be further hardened against sybil and collusion attacks[17].

Starship (Target 18 months post genesis)

In this phase, full responsibility for the network will be transferred to token holders.

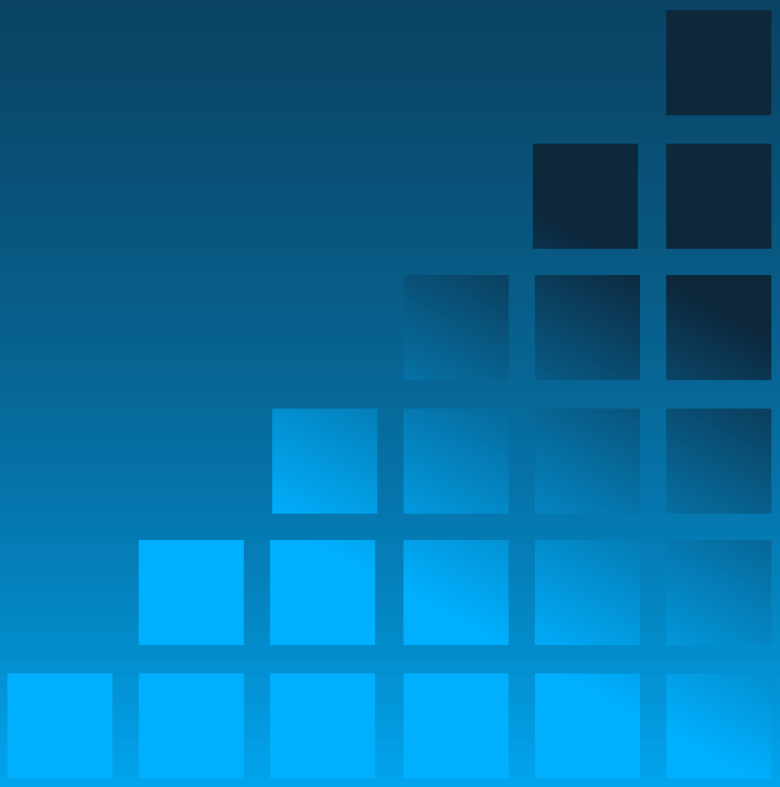
All three initiating components; the vote markets, second layer governance and social trading will be deployed to mainnet and operating effectively. Each of these will have tunable parameters, with a history of effective decentralised decision making, with a clear trend towards systematic optimisation.

By this point there will have been a number of successful quadratic funding sequences utilising the DMF treasury and a growing decentralised development community will be building on the network with a new roadmap that is currently unknown to the launch team.

In this phase the crowd will be in full control and all management keys will be burned. Responsibility for future development is now with the community and network leaders will be elected through decentralised direct democracy.

17 "On Collusion." 3 Apr. 2019, https://vitalik.ca/general/2019/04/03/collusion.html. Accessed 17 Nov. 2020.

Token Economics



Token Economics

Design Philosophy

Decentralisation

The finance.vote network is aiming for maximal decentralisation.

That is, we will aim to be as decentralised as possible throughout the development trajectory. Necessarily, the network will launch with a pseudo-autocratic power structure, but this will progress towards decentralized direct democracy over time.

From the outset, founders will manage some keys that hold final decision making power for a period of time. These keys will be transferred to the crowd once an effective governance structure has emerged.

The Finance Vote Token ($FVT) makes this possible, it represents power in the system. The finance.vote ecosystem will pioneer a number of new voting systems that are designed for generating the progressive diffusion of power away from any central arbiter within the system.

Incentivised Action

The $FVT token model is designed to generate user action through rational financial decision making. Users will vote in the system if it makes sense for them to do so. In the world of crypto economics that means it makes financial sense.

All token systems must wrestle with the balance of distributing tokens to participants in order to incentivise adoption and network value dilution arriving from inflation. Adoption comes at a cost.

We balance the incentive dynamics in such a way that they generate adoption through a range of vectors targeted at different stakeholders, including market analysts, decision makers, workers and liquidity providers.

All of these add new tokens into the ecosystem from a starting point, but are distributed to users who bring value to the system. Ultimately, it is the responsibility of the network to balance these incentives against one another, managing the inflationary and deflationary dynamics of the system along with a range of other monetary policy decisions.

The inflationary dynamics of the system at this point are a direction that can be steered by the $FVT holders.

Responsive Governance

Good governance is responsive. It is a system of decision making that responds to the needs and desires of the participants effectively.

The system is designed in such a way that users can build an understanding of key parameters in the system that can be tuned or optimised for maximum engagement and healthy ecosystem growth.

Finance.vote will release a range of voting mechanics that build the reputation of stakeholders in the system. User voting power will be scaled through a mix of meritocratic validation of decision making history and token stake.

Those that have the power in the system will be those that have earned it through participation and high quality decision making.

Those users who are effective in other areas of the system will graduate to the main DAO, the DMF, which will make high level monetary policy decisions and decide how the treasury is spent.

Discourse

The key to good decision making is dialogue.

As the system develops we will find mechanisms to channel and focus discourse into decision making. Our second layer governance system will provide a space for crowd curated user dialogue that can tangibly influence not only our system but others too.

It will be a platform for content aggregation, curation and collective learning. As the ecosystem develops we will build an inclusive international community, which aims to maximise understandability of the system and optimise for involvement in governance decisions.

Utility

The Finance Vote Token will aggregate utility over time by integrating functionality determined by the needs of the system and the desires of the token holders.

The system will hold day one utility. From the moment the token is tradable it will be exchangable for a voting identity in the system and usable within our vote markets. None of the systems functionality will be accessible without an identity.

There are three core aspects of utility that the founders are committing to deploying during the bootstrapping phase of the network: vote markets, second layer governance and social trading. We believe this utility set is strong enough to build a sustainable network, however this token economics system provides a substantial treasury which is to be spent on funding open innovation that falls within the emerging shared design philosophy of the system.

Identity Tokens

Identity is a crucial component in voting systems. The approach used by finance.vote is to issue a decentralised identity token (DIT) to participants.

These will take the form of NFTs that are tradable if the user desires. The cost of an identity token is dynamic (depending on demand) but begins at 100 $FVT. Users must burn this amount in our identity distribution system to obtain a DIT.

This identity is linked to their voting history and their performance within the system. This will generate both a rank and a vote power budget $V, our internal cryptocurrency. They are pseudo anonymous but are a vector for building trust and reputation to participating accounts in the system.

Quadratic Voting

Quadratic voting will change the world. It broadens the parameter space on decision making and is an ideal mechanism for filtering preference. Finance.vote will utilise this framework to build it's governance system and seek to find effective mechanisms for channeling user action into productive network outcomes.

We utilise quadratic voting in a mechanism we call Semantic Ballot Voting. Users are provided a constantly replenishing budget of vote power ($V), which they distribute on votes through various mechanisms in the system. Typically this action will involve sorting some list of semantic items (token cash tags in the first instance) by preference, through distributing $V quadratically.

Education

A crucial component of the finance.vote ecosystem will be building understanding across our community members of the kinds of systems we are making decisions about. Good decisions arise through informed consensus.

Asymptotically, the best players in this game will be those who can read code. We will support the development of understanding through teaching and materials of how best to understand the cryptospace. The best researchers will win.

Token Metrics

The $FVT token has an initial generation amount of 1 billion tokens (1,000,000,000 $FVT).

These tokens are split into a set of tranches as follows:

Initial Distribution

20% of the tokens (200,000,000 $FVT) are to be distributed to early adopting participants through a series of distribution rounds.

The first wave have concluded and took the form of two private rounds:
Seed 6% (60,000,000 $FVT) tokens @ $0.007
Private 12% (120,000,000 $FVT) tokens @ $0.008

Those participants that obtain tokens in these rounds are subjected to cliff-linear vesting over a period of 5 months.

The final 2% of these tokens (20,000,000 $FVT) will be distributed by a decentralised auction mechanism (auction.vote), which will go on to form a key component of the finance.vote ecosystem (details of this mechanism will be released in a standalone post).

Team and Advisor Stakes

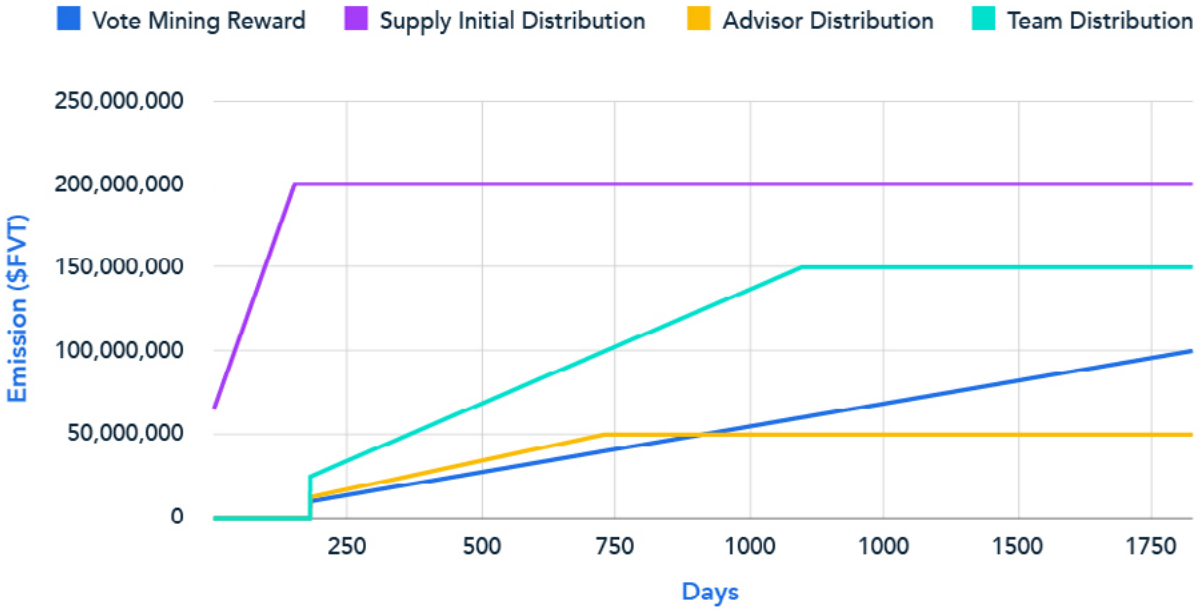
15% of the tokens are allocated to the founders of the network. These are released to the team using (6,3) year cliff-linear vesting i.e. vested for three years, with a 6 month cliff.

5% of the tokens are allocated to valuable strategic advisors. These are released individually to advisors using (6,2) year cliff-linear vesting.

Governance Incentive

10% of the tokens are to be distributed to voters of the system over a (6,5) cliff-linear vesting schedule. These tokens will be distributed to users proportionally to the number of $V spent in the system associated with their identities. We call this process vote mining and it is one of a number of mechanisms designed to break voter apathy in blockchain governance.

Vesting Schedules

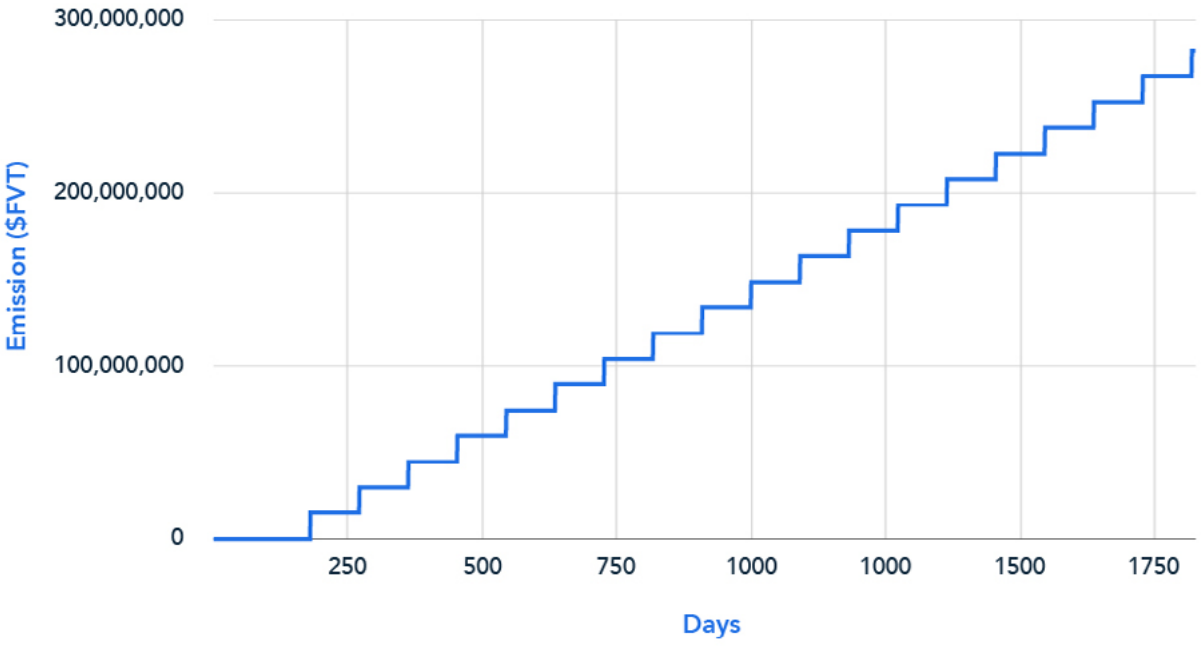


The DMF Treasury

30% of the tokens (300,000,000 $FVT) will be distributed through (20,5) step vesting i.e. 20 tranches of 15,000,000 $FVT, in a lump sum for 5 years to the DMF treasury.

DMF funding tranches will be distributed via quadratic funding mechanisms to stakeholders who bid to do work for the network. If the DMF participants choose, a proportion of each tranche can be burned, providing further control of the monetary policy.

DMF Treasury Emission



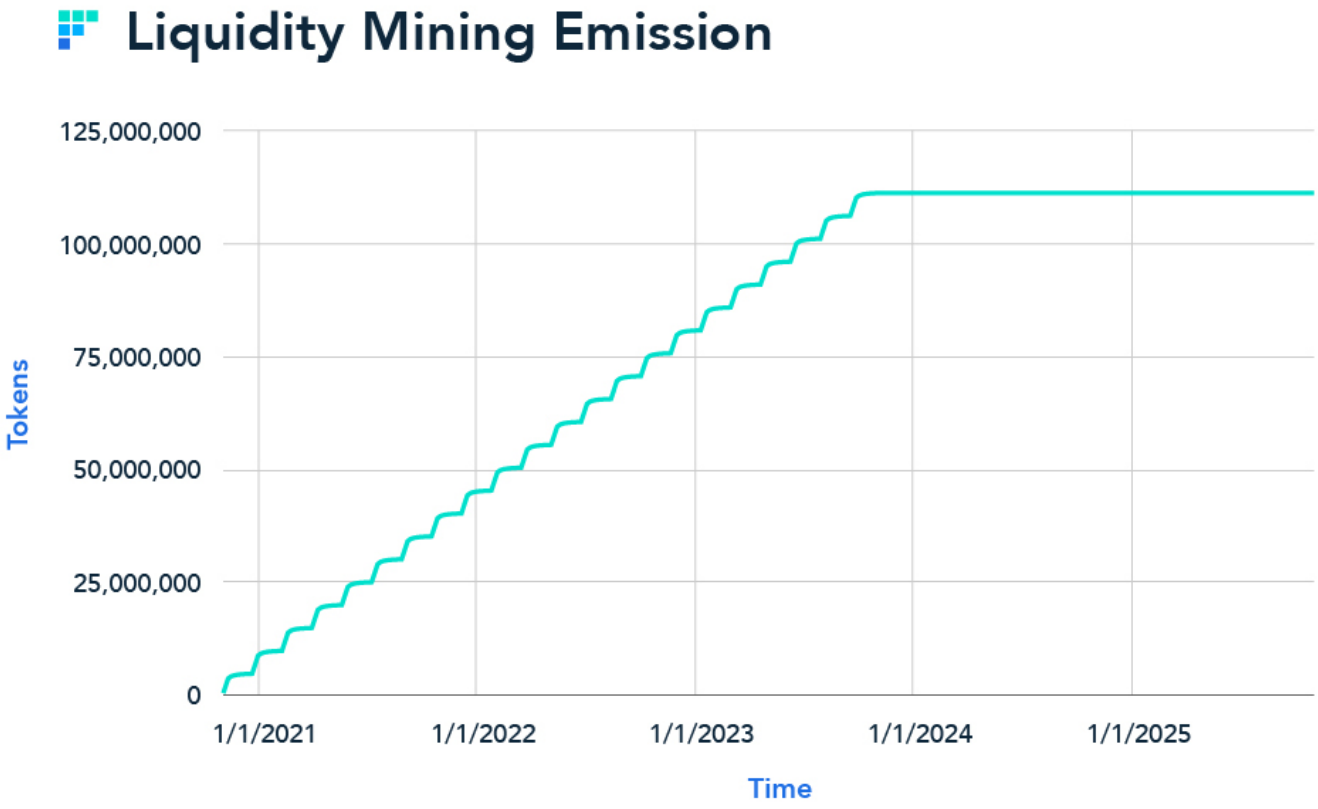
Liquidity Pool

20% of the tokens (200,000,000 $FVT) will be utilised to bootstrap the liquidity of the finance.vote network.

The liquidity pool is split as follows:

2% of the tokens (20,000,000 $FVT) will be utilised as match liquidity in the initial distribution auction.

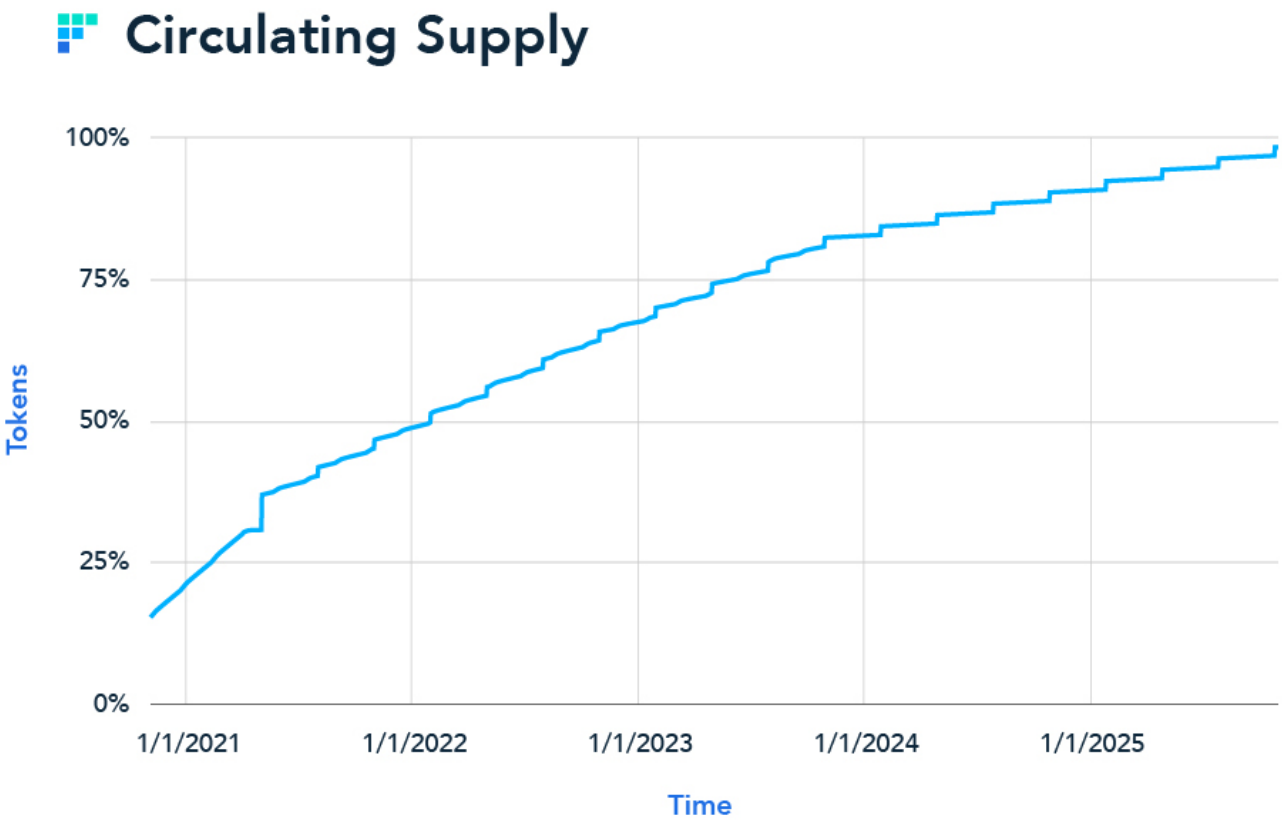
A minimum of 9% (90,000,000 $FVT) are allocated to liquidity miners in the DEX space. These will be distributed via a pulsed liquidity mining incentive scheme to holders of LP tokens in respective decentralised exchange pools.



9% of the tokens (90,000,000 $FVT) will be utilised to engage with the centralised exchange (CEX) space. These are unlocked from network launch, but will be utilised transparently so that users can understand monetary flows in the system.

Circulating Supply

The aggregated emission from these schedules provides us with the following emission curve represented as a percentage of total genesis supply.



Inflationary Mechanisms

The finance.vote core contracts hold the power to mint new tokens beyond the 1,000,000,000 $FVT at genesis. This is chosen to ensure that there is an open ended solution to incentivising adoption. In the first instance a small amount of additional inflation is used to seed liquidity for reward pools in our vote markets, starting @ 100,000 $FVT per week / per market.

Deflationary Mechanisms

In order for any user to take part in the system, they must first obtain a Digital Identity Token (DIT). In order to do this, users must obtain $FVT and burn at least 100 to take part. This introduces an adoption based deflationary dynamic to the system.

Emission Schedules and Monetary Policy

The emission schedule of a token system determines the inflation rate of a token economy.

It has recently become the trend to release entire token supplies in a matter months if not weeks in the recent DeFi boom. This has led to hyperinflation and short lived token economies.

We are not aiming for a multi generation store of value system, neither are we claiming to be "money" (not yet anyway). The Finance Vote Token ($FVT) is a utility token, which provides users with access to a governance system.

The governance system acts as a kind of crypto economic hub, which the users will ultimately control. $FVT is required to access the system, without it you will not be able to vote or participate in the governance decisions.

Cliff-linear Vesting

Cliff-linear vesting is a smart contract based vesting schedule that we have decided to add confidence to emission schedules.

The greatest threat to a token economy is a highly asymmetric token distribution, even worse if it is an unknown token distribution.

We have programmed a schedule, which releases a small proportion of tokens to network stakeholders in a lump sum, followed by a block-by-block distribution for a prolonged period of time.

It follows that:

Token Amount = (month of cliff from genesis, vesting period length in years)

$$TA = (m,y)$$

Vote Mining

A 100,000,000 $FVT(6,5) allocation has been granted to all voters in the system. This means that approximately 9,917,808 $FVT will be airdropped to voters 6 months after genesis and then continually at the same rate of 54,794 $FVT per day for 5 years.

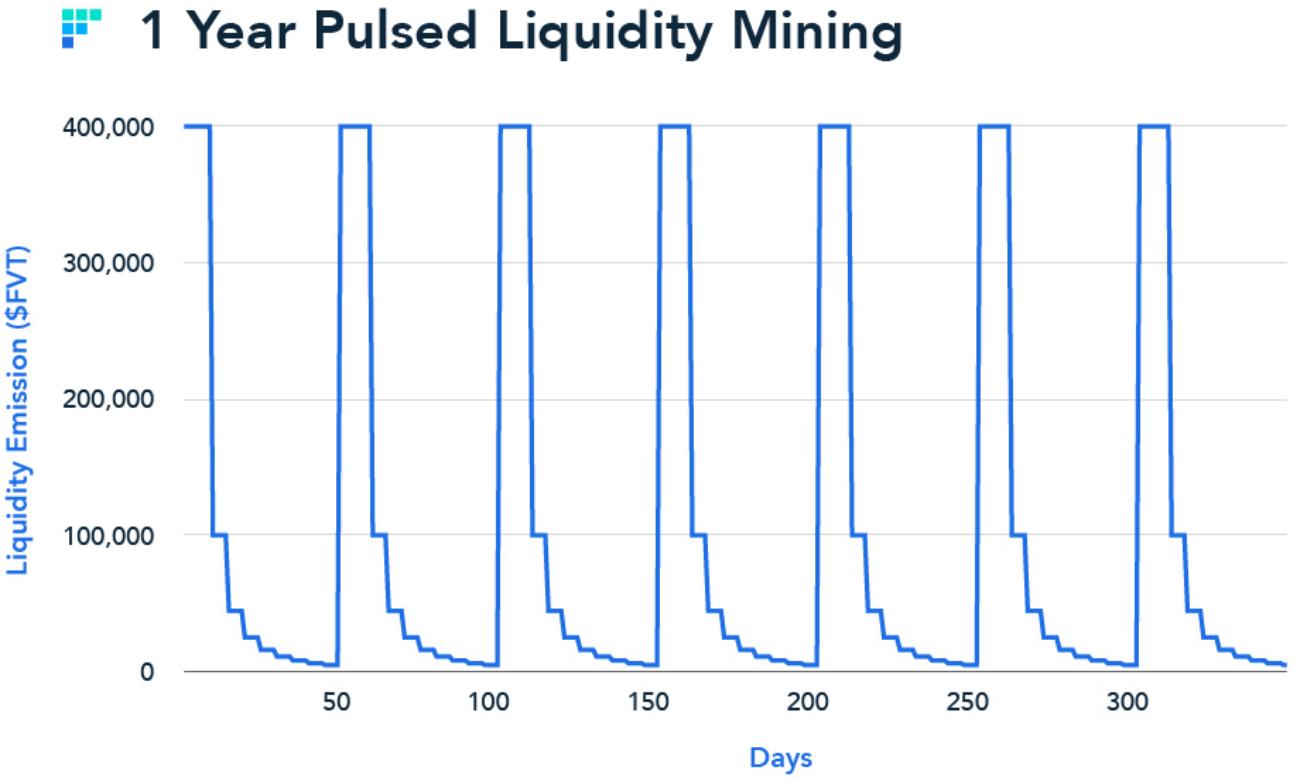
This allocation will be steered by the community throughout the 5 year vesting period. At the moment it is only possible to vote in our vote markets, but eventually vote mining rewards will be flowed to both our miniDAOs and the DMF to break voter apathy.

Pulsed Liquidity Incentives

The provision of decentralised liquidity is a revolution. The dynamics of this activity are very early, however the dawn of the "agricultural revolution" has introduced incentive dynamics to the liquidity provision process with demonstrable success.

We have created a tuneable system that will ensure that we maintain effective capital efficiency of our trading pools for the lifecycle of the network development, aiming to optimise for trade volume, market depts, inflation cost through dynamic incentives.

Our approach to this is through adding a cyclical liquidity dynamic, with tunable parameters, that include pulse height, quadratic decay rate and a pulse width.



The result is a liquidity cycle producing periods where: yield is high, yield is low and a range of levels in between that drop quadratically between pulses.

This provides LPs with short time horizon trading strategies with an opportunity to optimise their yield through complex farming techniques, or users with a longer term strategies deciding to stay the pool across cycles.

The management of these parameters will be tuneable in the DMF and offer the possibility to minimize the impact of divergent loss by optimising for pool growth through governance activity.

Summary

The finance.vote token economy introduces a range of dynamic crypto economic monetary policy ideas with the view of creating a sustainable crypto economic hub. The system uses collective decision making and voting technology to create a participatory token economy driven by the desire to understand the cryptospace itself.

Team

Team

The finance.vote team will take the project from concept to realised decentralised DeFi ecosystem. They will realise the three core cryptoeconomic components outlined in this whitepaper and facilitate the handover of the network to the community. We anticipate that this process will take anywhere from 18 months to three years.

The goal for any decentralised system, should be to make the initial founders irrelevant and that is why we consider ourselves the "launch" team. The future team will be the token holders. They will be the agents of the future of this network and their token holdings will represent their power in the system.

The path to this "Exit to Community," moment is outlined elsewhere in the whitepaper. It is a multi-phase process that will require the establishment of norms and practices for working with both novel decentralised tools and new methodologies for decentralised governance. The team takes on the responsibility for not only building the technology, but also leading and educating the community to run the system sustainably for themselves.

The team will scale to a massively distributed group of decentralised individuals, that will coordinate on a shared vision that begins with the narrative in the whitepaper, but will end with an indeterminate goal.

Dr Nick Almond

Founder and Protocol Leader

Nick is a physicist by background, spending 10 years studying and working in experimental physics, culminating in a doctorate in biophysics and surface science. After a stint at an astrophysics research institute he took a lectureship position teaching mathematics and cryptography, which is where he discovered Bitcoin.
Over a seven year period Nick transitioned into a range of academic senior leadership positions and took a disciplinary detour into education, learning theory and governance research. His academic career concluded with a role as an associate dean at the London College of Fashion, where he taught courses on emerging technologies and designed approaches for technology enhanced teaching practice.

His passion is in blockchain technology and he believes that the ability to organise at scale using voting technologies will revolutionize the way that we live, work and learn in the future.

Christoper Smith

Blockchain Architect

Christopher is an established crypto innovator. He has spent many years as the co-founder and CTO of crypto projects including Lunyr and BitMesh. Christopher has also developed algorithms for IOT and deep learning applications. He was a PhD candidate in Mathematics and Computer Science and holds an M.S. and B.S. in Mathematics and Computer Science respectively.

Naomi Dara Harris

Brand & Product Creator

Naomi has been an early contributor in the blockchain and crypto space since 2015, and has been instrumental in defining and launching successful brands and projects, creating accessible products to drive adoption of crypto ventures.
An integrated designer of over 12 years, Naomi has worked with global brands across many industries including fintech, healthtech, education, and renewable energy, building functional, memorable and business-driven branding, marketing and products.

Louis Chang
Chief Creative Advisor

Louis is a creative, he honed his skills over 12 years, working for some of the largest creative agencies in the world including Saatchi & Saatchi, Ogilvy and JWT. He discovered Bitcoin in 2012 and in 2013 Founded Proof of Work, the worlds first crypto digital agency. PoW developed creative solutions for many large projects including Ethereum, MakerDAO & Cardano. During this time was also an organizer of Coinscrum, the then biggest Crypto meetup in the world. In 2017, he was approached by Dr Gavin Wood to become the Creative Director & Co-Founder of the Web3 Foundation. During this period he presided over the Auction and Launch of the Polkadot protocol. He is now developing the Arkology Institute, an NGO designed to Protect medicinal plant Biodiversity and indiginous culture around the world. His role as an advisor at Finance.Vote consists of Digital Shoulder massages, Pep talks and the occasional Wisdom grenade… occasionally.

Nicholas Gregory
Chief Technical Advisor

Nicholas is a cryptocurrencies Entrepreneur, Software Engineer and has been involved with bitcoin since 2012. Providing start-up support, Nicholas co-authored BIP175 of the bitcoin specification and has been instrumental in designing bitcoin protocols such as MainStay and Layer 2 Solutions.

He has had leadership positions, building talented teams, in multiple Wall Street Investment banks. Nicholas developed many systems and programmes for a variety of companies and industries throughout his career, including Verizon, Capgemini, Merrill Lynch and JP Morgan. He delivered the first swiss regulated gold back token for DGLD and has provided enterprise bitcoin integration on cloud storage systems such as Google Drive and Dropbox.

Today Nicholas is CEO of CommerceBlock and has been quoted in many major publications regarding cryptocurrencies and advisory work for government trade bodies.

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