ZIVOE FINANCE

We're Taking Aim at High Interest Lending

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1. Introduction

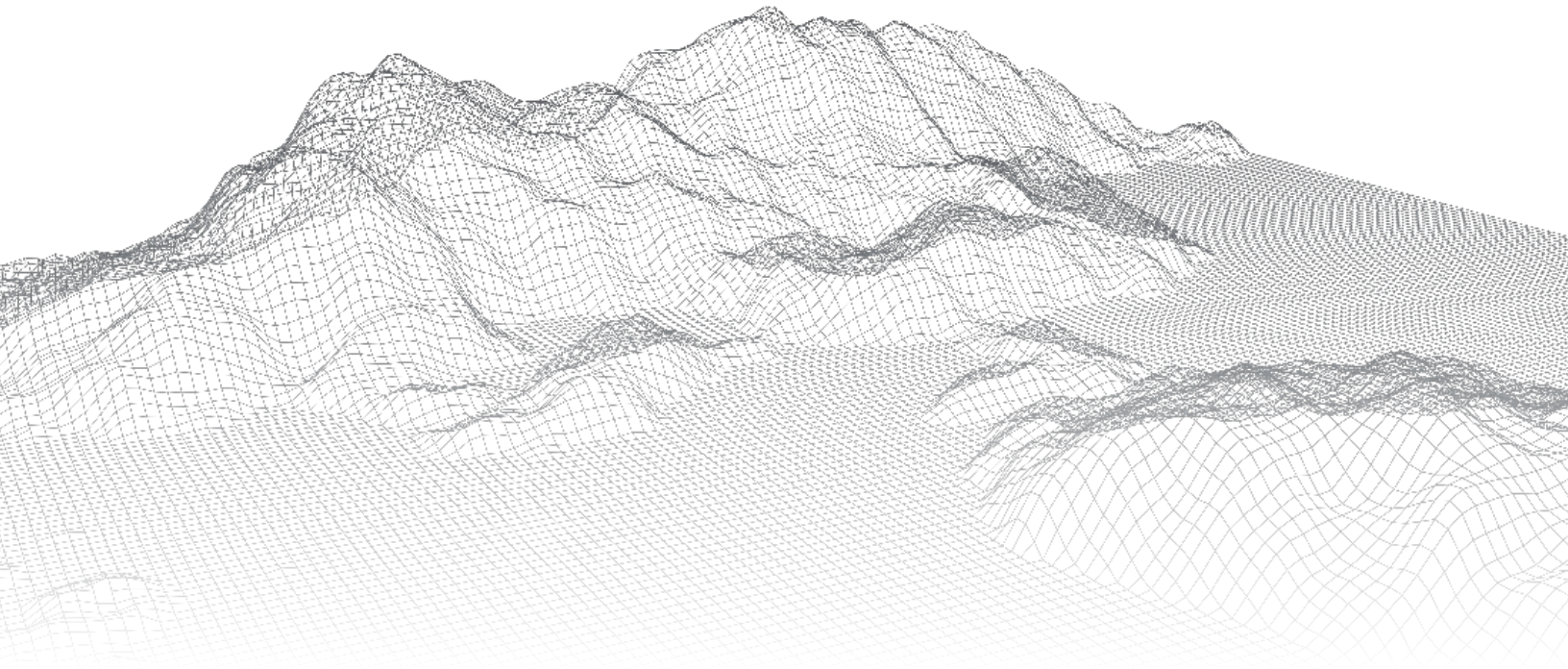
Zivoe is a decentralized credit protocol that aims to expand affordable credit access to underserved consumer markets and generate sustainable returns for liquidity providers.

This is achieved through a hybrid yield generation system that earns yield through on-chain and off-chain mechanisms while compounding returns. It draws heavily on principals from traditional finance ("TradFi") and properly executes them within the decentralized financial ("DeFi") ecosystem.

Staying true to the ethos of decentralization and transparency, Zivoe determines the allocation of capital through a decentralized autonomous organization ("DAO") which orchestrates decisions through on-chain governance.

Liquidity providers can participate by supplying stablecoins to either the senior or junior tranche, depending on desired rate of return and risk appetite. Additionally, individuals may acquire $ZVE, the native protocol token, to engage in governance decisions and receive protocol fees.

Finally, Zivoe is modular and flexible, able to engage with other DeFi protocols currently in existence, while having the ability to interact with new protocols in the future through its modular architecture.



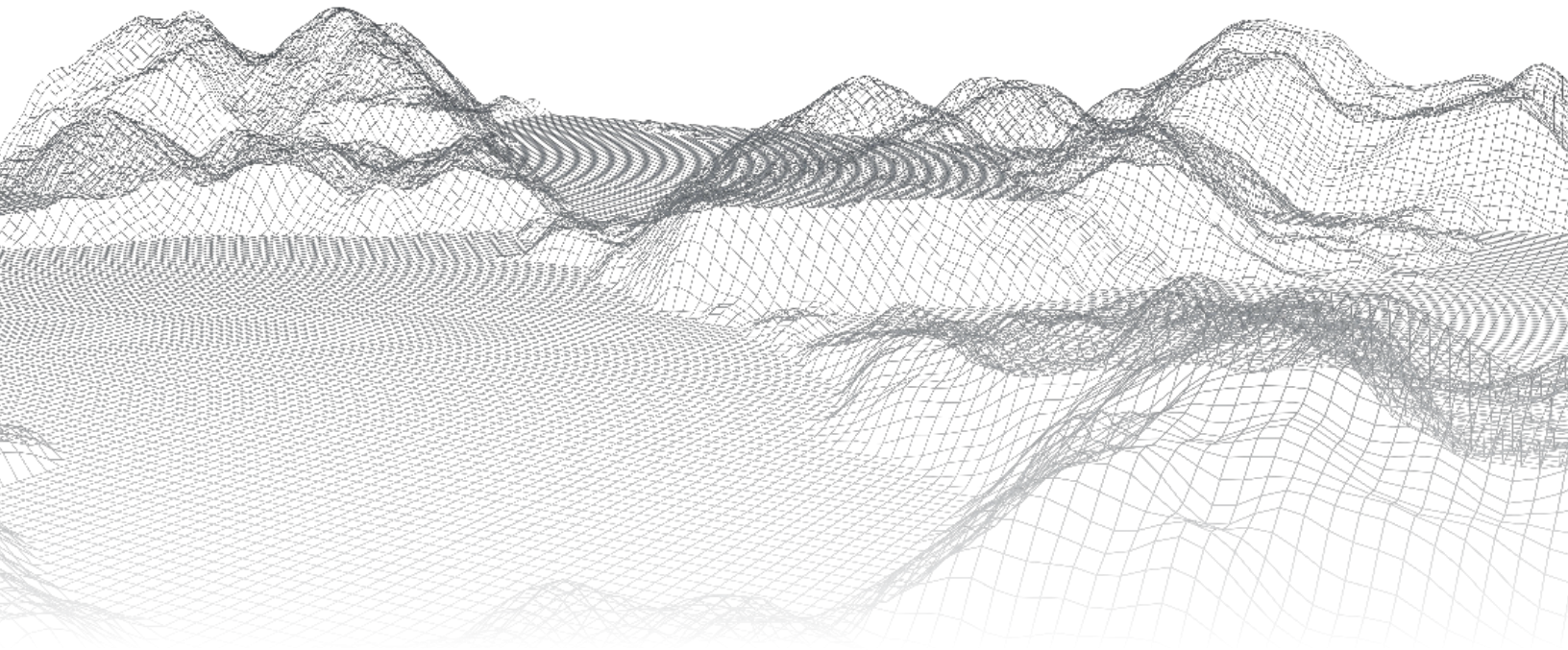
2. Our Mission

Zivoe was founded on the principle of financial inclusion. We believe everyone should have access to affordable financial products and services such as savings accounts, insurance, and credit. Yet, 1.7 billion people worldwide are financially excluded[1]. Often when individuals are financially excluded, they look to alternative financial solutions such as high-interest lenders.

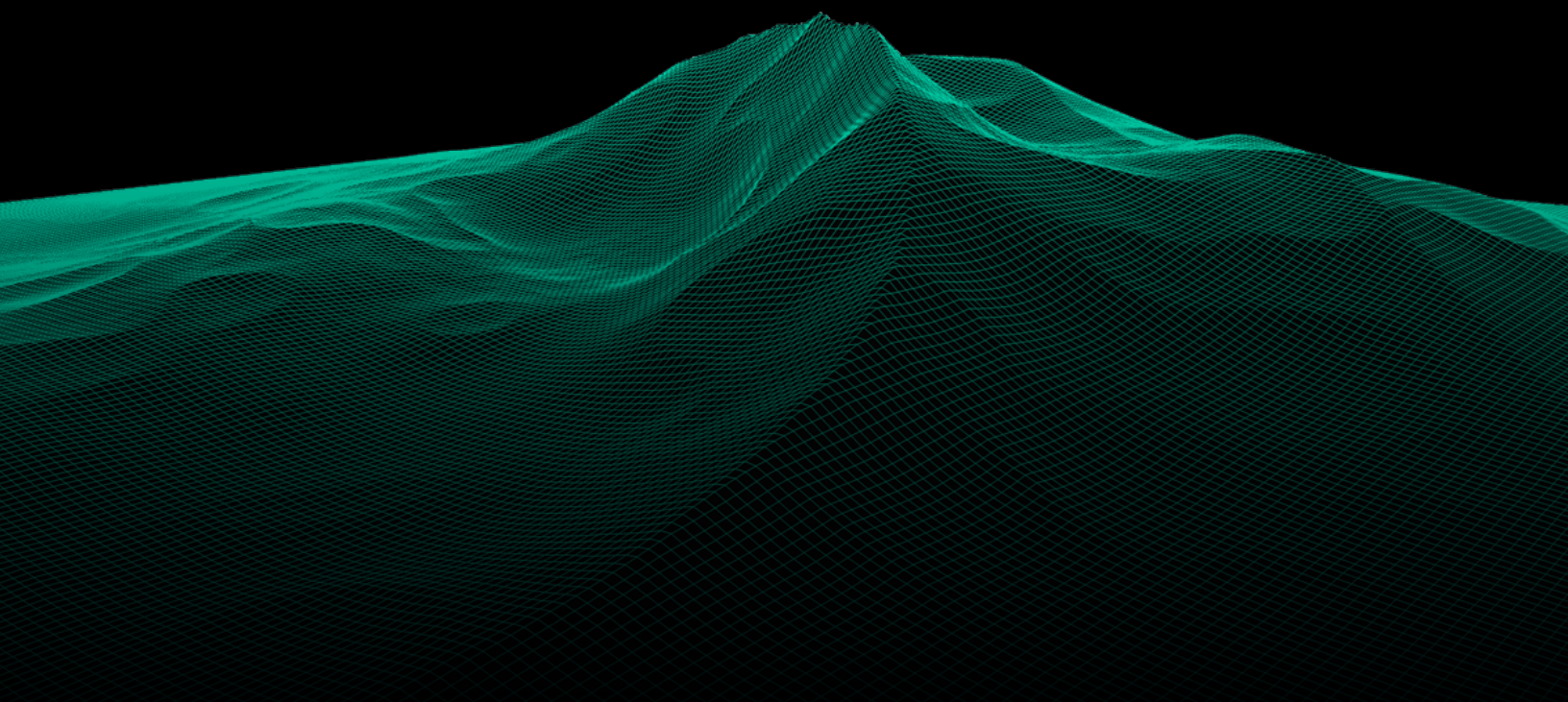
In the United States alone, 12 million adults' resort to using payday loans each year[2]. These loans can carry interest rates as high as 390%[3] and generate a combined $9 billion in annual fees alone[2]. To make matters worse, over 80% of payday loans are rolled over or followed by another loan within 14 days[4]. This traps borrowers in cycles of high-interest debt.

At Zivoe we're taking aim at high-interest lending. Our protocol will make an impact in consumer markets by partnering with lenders that offer affordable credit solutions to underserved individuals. They will underwrite and originate loans which will then be funded by the protocol. Alongside this, Zivoe is working to build the infrastructure necessary to support direct to consumer lending. Our goal is to bridge the gap between TradFi and DeFi to become the first automated consumer lender.

Zivoe empowers anyone to fight back against high-interest lending. Join the movement today and help us build a more inclusive future.



3. Tranches



3.1 Initial Tranche Offering ("ITO")

The ITO will be the first opportunity for users to commit capital to Zivoe Finance and receive protocol tokens. It will be held in accordance with all applicable laws and regulations. For a limited time, participants will be able to deposit stablecoins into the senior tranche, junior tranche, or both.

For each stablecoin deposited, users receive a corresponding tranche token in a 1:1 ratio, either 1 $**zSTT** (Senior Tranche Token) or 1 $**zJTT** (Junior Tranche Token) which are claimable after the ITO concludes.

Furthermore, for each stablecoin deposited, senior tranche depositors are awarded exactly 3 $**pZVE** (pre-ZVE), and junior tranche depositors are awarded 1 $**pZVE**. At the end of the ITO, $**ZVE** tokens will be airdropped to participants based on their proportional ownership of $**pZVE**.

3.2 Tranches Explained

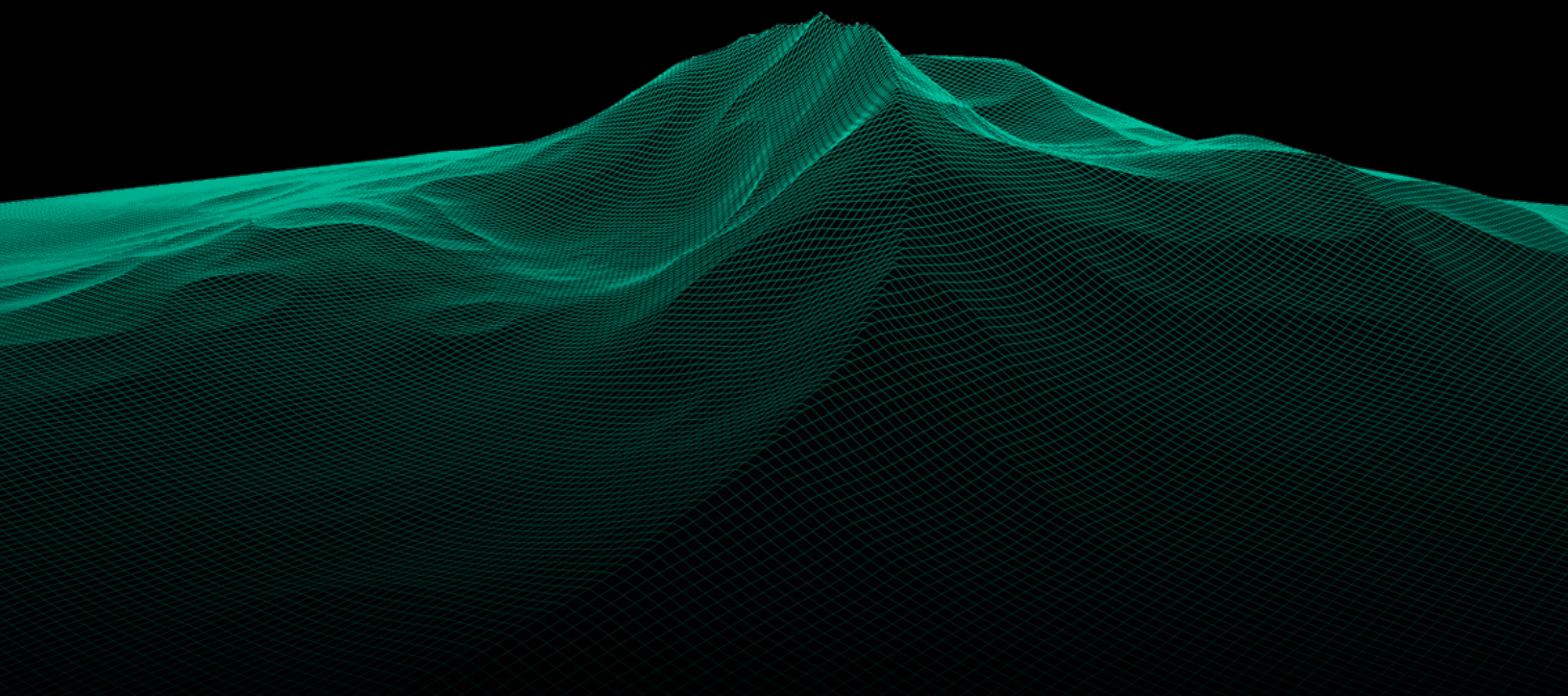
Tranches are a means of layering credit risk within the protocol such that if defaults or liquidations occur, participants within the junior tranche are affected first, while participants within the senior tranche are affected last[5].

In general, the junior tranche offers higher risk and higher reward. In the event of a default stemming from loan origination, the junior tranche is affected relative to the notional size of the default. By contrast, the senior tranche is not penalized in the event of a default unless the total defaults protocol-wide exceed the notional amount of the junior tranche. The senior tranche is awarded a consistent yield with lower risk due to the protection offered by the junior tranche.

After the ITO concludes, tranche tokens can be minted through a process known as "Ongoing Minting" where users can supply additional stablecoins. While $**ZVE** incentives are not guaranteed, governance may elect to support $**ZVE** incentives for Ongoing Minting behavior.

In future versions of the protocol, governance may elect to establish a means of insurance to provide additional protection to tranche participants in the event of a default or loss of capital.

4. Yield Generating Operations



4.1 Yield Generating Operations

Zivoe will initially support three lending products: fixed term loans, credit lines, and credit guarantees. These products are intended to facilitate commercial loans to businesses working on a social good or public benefit. Starting with commercial loans will enable Zivoe to scale operations quickly, diversify risk, and improve access to credit.

In addition to these core lending products, the DAO may elect to deploy capital into more traditional DeFi strategies including yield farming, market making, and other viable methods of generating yield to ensure idle capital is used effectively.

4.2 Fixed Term Loans

Fixed term loans carry a fixed duration, payment schedule, and maturity date. They can be collateralized or undercollateralized. These loans will be available in two forms: balloon loans and amortizing loans.

Balloon loans require interest-only payments at regular intervals, with the full principal and final interest payment due at maturity. Amortizing loans require regular payments consisting of both interest and principal.

4.3 Credit Lines

Credit lines offer borrowers greater flexibility than fixed term loans. They carry a set maturity date and have a borrow limit. However, they do not have a fixed payment schedule. Instead, payments are made at the discretion of the borrower. Interest accrues on the outstanding balance of the amount drawdown. Once the balance is paid down, that amount is again available for borrowing.

Zivoe's credit lines are specially designed to help socially conscious consumer lenders scale. For example, a consumer lending company might open a credit line with Zivoe to fund the growth of its consumer loan portfolio. Each time the consumer lender underwrites a new borrower, they could drawdown on the credit line and use that capital to fund the new consumer loan. These newly originated consumer loans would then act as collateral for the credit line issued by Zivoe.

Note that credit lines are not exclusive to consumer lending companies and that other integrations are possible.

4.4 Credit Guarantees

Credit guarantees are a massive leap forward for interoperability between fiat and cryptocurrency. Fundamentally, these are off-chain loans originated between a borrower and a third-party lender. These loans are then collateralized using the DAO's capital. Credit guarantees enable third-party lenders to liquidate collateral posted against the loan on-chain if the borrower defaults.

Credit guarantees offer two primary advantages. First, borrowers will receive fiat directly instead of having to handle on-chain assets. Second, credit guarantees are a more efficient use of DAO capital because on-chain capital posted as collateral will be directed to various on-chain yield protocols (see "Algorithmic On-Chain Yield"). This introduces a new paradigm for leveraging on-chain capital for off-chain loan origination.

4.5 Algorithmic On-Chain Yield

Outside of normal lending operations, Zivoe can engage in more traditional DeFi activities including yield farming, derivatives, and more complex yield generation. Through on-chain governance, Zivoe can whitelist pre-designed smart contracts called "on-chain yield lockers" which algorithmically deploy capital into various protocols. This allows the protocol to evolve overtime and introduce lockers with newer or more efficient features.

Capital could be deployed into something as simple as an AAVE v2 lending pool or into other more complex protocols. This is akin to the Algorithmic Market Operation Controllers ("AMOs") that FRAX utilizes to generate yield on assets in their treasury[6].

4.6 Defaults and Liquidations

If a borrower misses a payment by the specified due date, the loan is considered "delinquent." This marks the start of a grace period in which the borrower has a limited amount of time to remit payment before the loan is considered in "default." Payments made during the grace period may be subject to late fees or penalties.

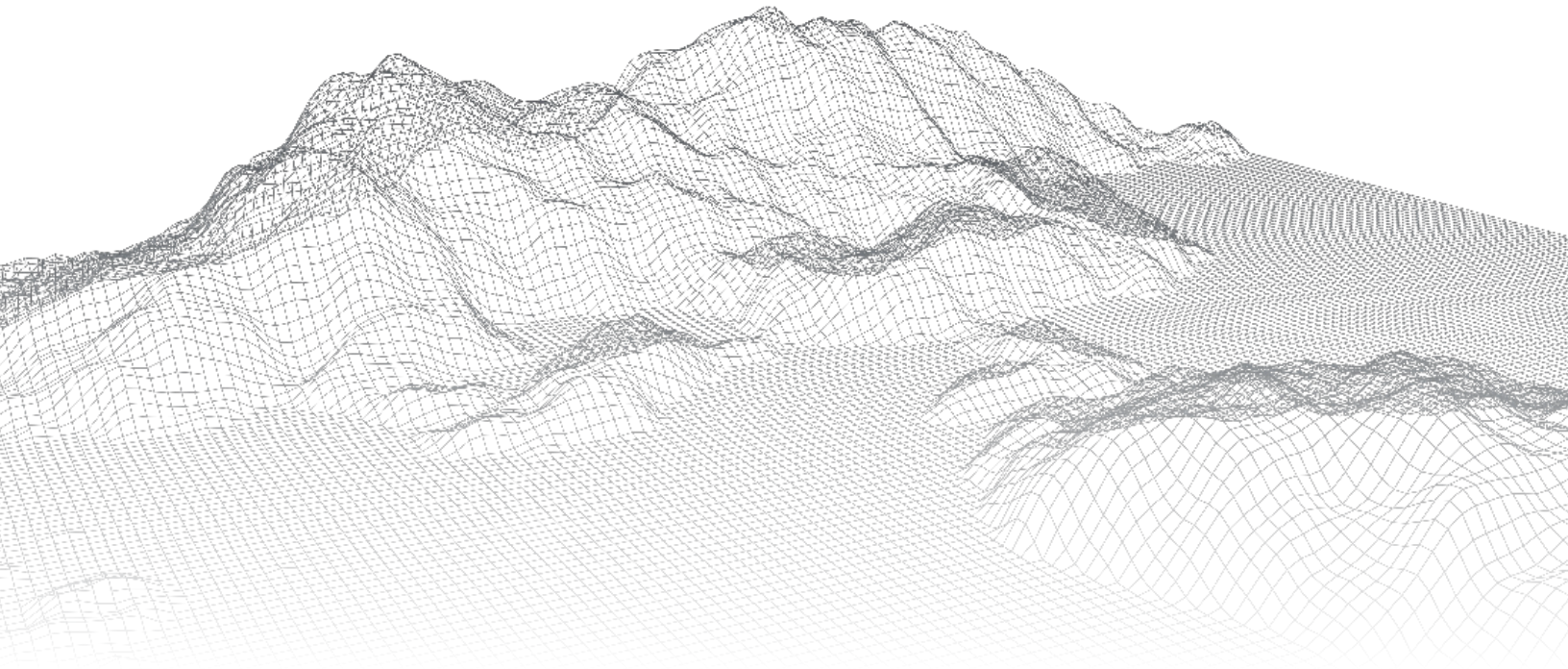
Zivoe Finance (or an entity acting on behalf of Zivoe Finance) will pursue legal action against the borrower to collect the remaining balance if a default occurs. Any principal collected from legal action will restore the shortfall within the junior tranche. Any interest collected beyond this will be distributed normally.

Liquidations for Fixed Term Loans & Credit Lines

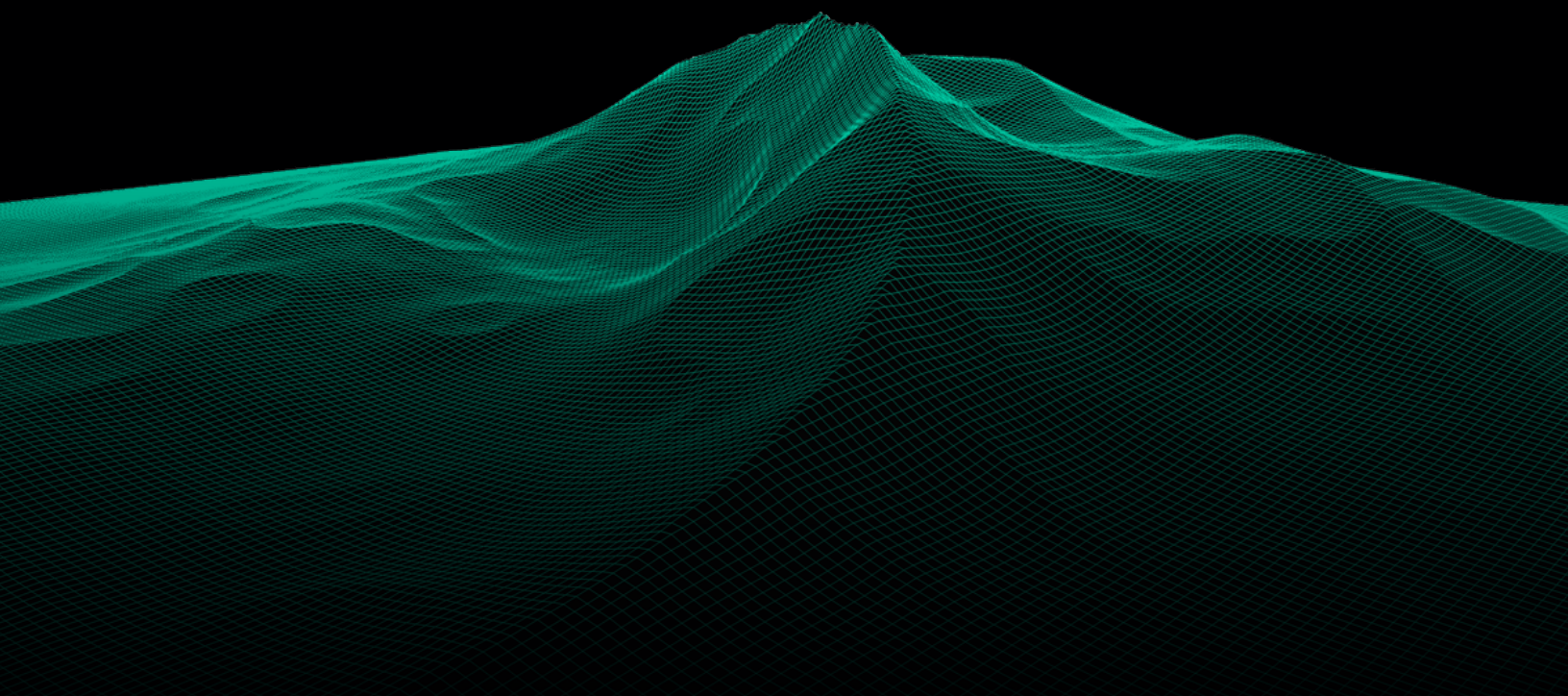
If a default occurs for a fixed term loan or credit line, the borrower must pay the remaining outstanding principal of the loan plus interest. Any principal that is not repaid will be written off the DAO's balance sheet. The net asset value attributed to the junior tranche will decrease accordingly to cover the loss, protecting the senior tranche.

Liquidations for Credit Guarantees

If a default occurs for a credit guarantee, the borrower must pay the remaining outstanding principal of the loan, plus interest to the third-party lender. Any principal not repaid will be liquidated by the third-party using the collateral posted on-chain.



5. Tokenomics



5.1 The Zivoe Token ($ZVE) - Utility & Governance

The Zivoe Token, $**ZVE**, is an ERC-20 token with a fixed supply of 25,000,000. This is the primary utility and governance token of Zivoe, which enables owners to vote on governance proposals (or delegate their voting power). Furthermore, $**ZVE** can be staked to receive protocol operation rewards. The supply of $**ZVE** will be distributed between the Zivoe DAO, Initial Tranche Offering, team & advisors, and investors.

5.2 Governance

Our goal is to take a sound approach to governance based on traditional corporate structures. This will eliminate many of the pitfalls of DAO governance while providing on-chain transparency.

Day-to-day operations will be run by elected DAO members allowing for timely decision making. All community members will be able to propose higher-level changes by initiating what is known as a Zivoe Improvement Proposal ("ZIP"), which begins a voting process. Community members may vote yes or no on the proposal with their voting power being determined by the amount of $**ZVE** they own. If the vote passes, the ZIP enters a timelock contract, which enables execution after a set period of time.

5.3 Tranche Tokens ($zSTT & $zJTT)

Tranche tokens are receipt tokens which can be used to claim yield. As yield is generated, a portion will be diverted to the staking contracts for $**zSTT** and $**zJTT**.

To receive this yield, users must stake their tranche tokens to the corresponding staking contract. Simply holding tranche tokens in a wallet will not earn yield. Staking within the Zivoe protocol is similar to Curve Finance's multi-asset rewards contract7 such that staking a token can result in the distribution of multiple types of assets. For example, the $**zSTT** and $**zJTT** staking contracts could receive both a stablecoin and $**ZVE** over-time as a distribution.

During the initial tranche offering, the supply of tranche tokens is determined entirely by the amount of capital supplied to either tranche. Afterwards, the economics behind tranche tokens changes slightly.

Ongoing minting allows tranche tokens to be minted at a 1:1 ratio per stablecoin deposited (again, for the corresponding tranche). Thus, there will be ongoing arbitrage opportunities to mint tranche tokens at a discount relative to future yield generated due to the compounding nature of the DAO. To capture this arbitrage opportunity, external actors would have to stake their tranche tokens shortly after acquiring them to capture the discounted yield.

5.4 Yield Distribution

Yield is distributed at regular intervals across the various staking contracts (of which there are three): one for $**zSTT**, $**zJTT**, and $**ZVE**. However, not all yield generated will be forwarded to staking contracts since a portion is compounded within the DAO.

Zivoe takes a risk stratified approach to distributing yield in a way that delivers regular, smooth disbursements to different stakeholders within the Zivoe ecosystem. To facilitate this, all yield is sent to a "Yield Distribution Locker," which algorithmically forwards yield across stakeholders based on various, adjustable metrics.

Governance can determine a target APY for the senior tranche, and a corresponding ratio that determines a target APY for the junior tranche. For example, the target rate of the senior tranche could be 8.00% with a ratio of 1.5 such that the target rate of the junior tranche is 12.00%. This naturally incentivizes a certain equilibrium between the junior and senior tranche with respect to notional sizes.

The hierarchy, or waterfall, in which yield is distributed adheres to the following:

1. Protocol Earnings
2. Tranche Stakers
3. Residual Earnings

A portion of the yield generated by the protocol is taken off the top and returned to the DAO to facilitate compounding earnings. From there, a large portion of the yield is distributed to the tranches (via the staking contracts for $**zSTT** and $**zJTT**) to meet each target rate of return.

Finally, any excess or overage of yield generated (relative to the target rates) is attributed equally between the two tranches and the DAO.

Other mechanisms that may or may not be included within this yield distribution process include the buy-back and burning of $**ZVE** from secondary markets.

More on the mathematics behind yield distribution will be available in the Zivoe Finance Yellow Paper.

6. Disclaimer

This paper is only intended to provide general insight into the initial concept and design of the Zivoe Finance Protocol. This paper is not complete, and the information contained herein may change at any time without notice. We make no representation or warranty, express or implied, with respect to the accuracy, reasonableness or completeness of any of the information contained herein, including, but not limited to, information obtained from third parties. The information contained herein is not intended to provide, and should not be relied upon for, accounting, legal or tax advice or investment recommendations.

Again, this paper is for general information purposes only. This paper is not a contract, and this paper neither provides investment advice nor a recommendation or solicitation to buy or sell any investment and should not be used in the evaluation of the merits of making any decision you chose to make respectively with the Zivoe Finance Protocol.

Due Diligence
There are systematic risks that may cause a drop in the value of assets corresponding to each tranche. This includes downward price movements in treasury assets, exploits that may occur in protocols Zivoe Finance interacts with, and stablecoin de-pegging. Participants should complete thorough due diligence prior to deciding to interact with the Protocol.

Regulations
At the current time of writing this paper, regulatory guidance for blockchain technologies and DAOs are unclear and sometimes contradictory. Compliance in regards to both financial transparency and consumer privacy laws is one such challenge. The development team will continue searching for guidance throughout the project and implement a proper course of action once clear guidance becomes available.

7. References

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