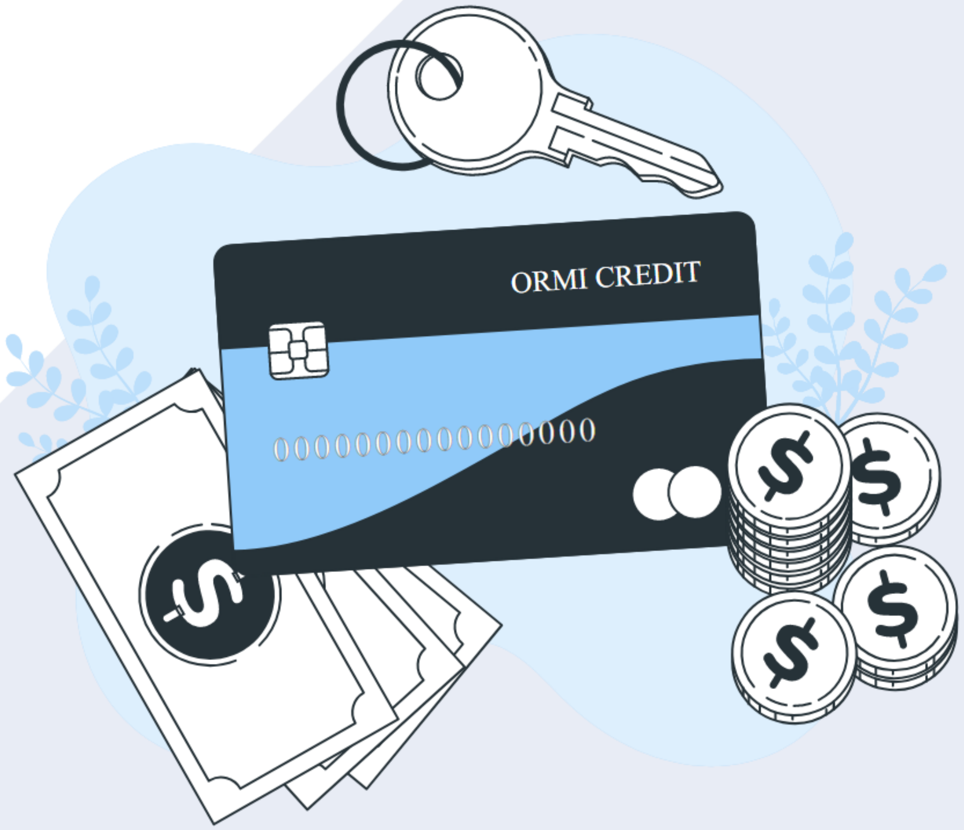
Ormi

About | We are HIRING! | Alpha Testnet (Coming Soon)

The Decentralized Credit Protocol

Ormi is a multi-chain, non-custodial, non-KYC, permissionless, decentralized credit protocol for issuing undercollateralized loans to anyone without relying on real world identities.

Waitlist | Discord | Whitepaper



Our Mission

- Permissionless decentralized credit protocol for issuing undercollateralized loans/credit based on Web3/Metaverse reputation only, without the need for KYC.
- Default risk and defaulted debt is completely managed in a Web3 native way.

Problem

- **Permissionless** liquidity/lending protocols (e.g. Aave[1], Compound[2], MakerDAO[3]) **require 100%+ collateral** (often 150%) to secure the loan.
- In other words, for a $1,000 dollar loan, user needs to deposit $1,500 worth of ETH. **Capital inefficient**.
- Existing **under**collateralized lending solutions are **permissioned**, exclusively towards institutions and require KYC (e.g. Maple, Goldfinch).

1. Aave – Open Source DeFi Protocol
2. Compound
3. MakerDAO | An Unbiased Global Financial System

Market

- As of Feb. 2022 (DeFi bear market), top 3 overcollateralized lending protocols have combined liquidity/value locked of $32 Billion[1]
- **Ormi's Goal: to capture all $32 Billion liquidity market and beyond.**

LENDING DEXES DERIVATIVES PAYMENTS ASSETS

#	NAME	CHAIN	SECTOR	TVL (USD)	1 Day %
1	Maker	Ethereum	Lending	$16.16B	1.75%
4	Aave	Multichain	Lending	$9.35B	5.31%
5	Compound	Ethereum	Lending	$6.65B	1.11%

1. DeFi Pulse - The Decentralized Finance Leaderboard

Competitors

Undercollateralized	Permissionless	Projects
✗	✓	Aave, Compound, MakerDAO
✓	✗	Maple[1], Goldfinch[1], TrueFi
✓	✓	Ormi

1. Existing undercollateralized lending protocols are heavily permissioned, i.e. rely on KYC or lending to institutions only.

Ormi's innovation

Ormi introduces world's first permissionless undercollateralized loans (< 100% collateral ratio) to enable new capital efficiency frontier for Decentralized Finance (DeFi) for Web3/Metaverse natives.

✗ **NO MORE: for a $1,000 loan, user needs to collateralize $1,500 worth of ETH.**	✓ **INSTEAD: for a $1,000 loan, user collateralizes $500 - $900 worth of ETH.**
✗ NO NEED: KYC or reliance on TradFi credit scoring agency.	✓ CREDIT SCORE BASED ON: Web3/Metaverse reputation & on-chain history
✓ DEFAULT RISK: - Reduced by Anti-Sybil/Reputation module. - Defaulted debt deficit covered by debt restructuring module.	

Preview – Web3 Reputation/Credit Profile & Oracle

vfei.eth

0xf03e58...eaa89873

did:3:kjzl6c...9nza9lo6

2 | 1102 days | 0xfeiprotocol

victorfei | Email Verified

Credit Score 2.00

Health factor 49.01

Max Collateralized Borrowing Limit $40.00K

Max Credit Limit $10.00K

Total Borrowing Limit $50.00K

Following 12K Followers 135 TVF $250,145,566

+ Follow

Total Assets Summary

on Ethereum $20.00K

on Polygon $30.00K

on Avalanche $15.00K

on Arbitrum $5.00K

on Harmony $6.00K

Wallet

Frax

Fei

Loan History Summary

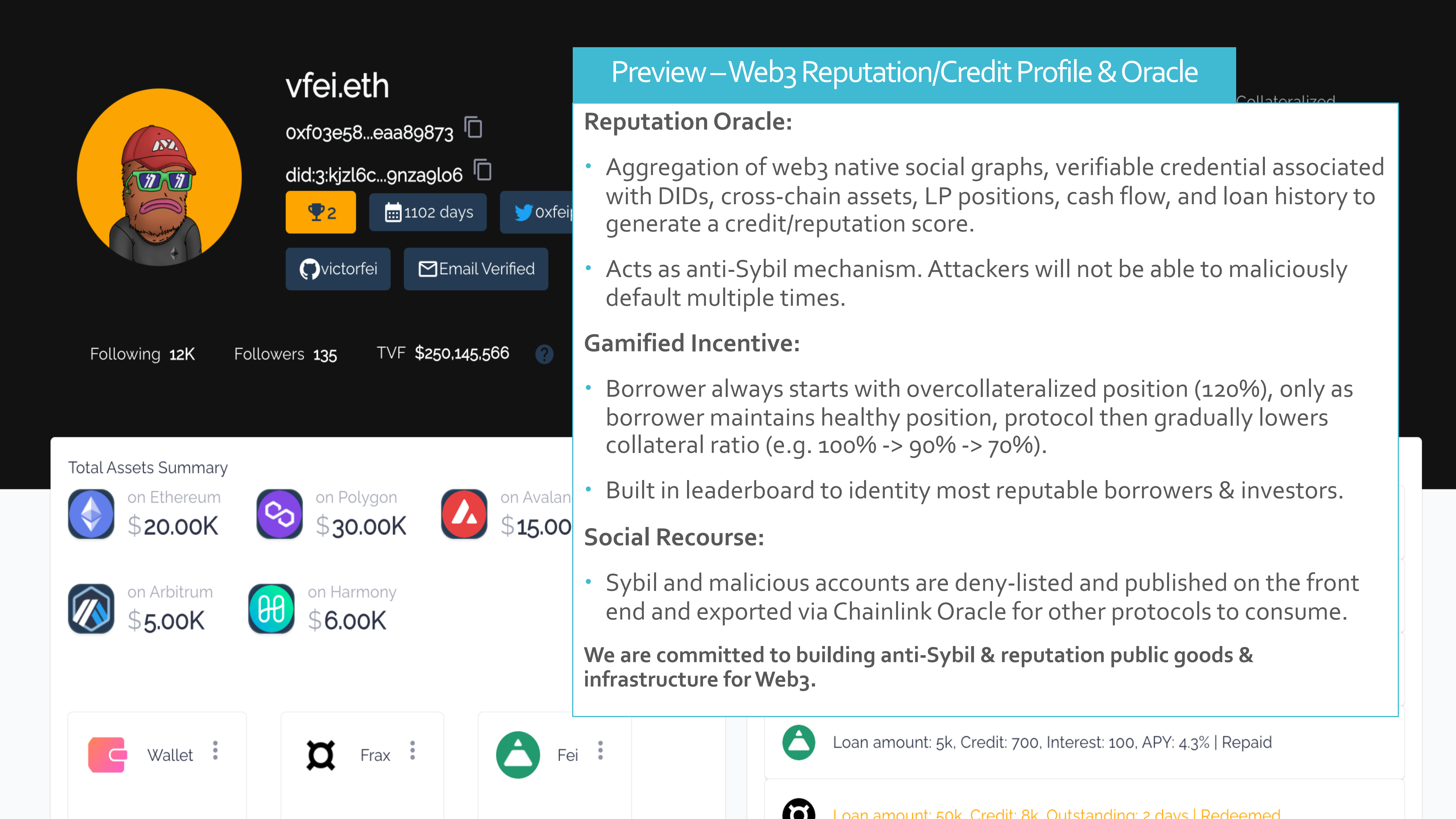
Loan amount: 50k, Credit: 8k, Duration: 5 days | Borrowed

Loan amount: 2k, Credit: 0, Duration 10 days | Borrowed

Loan amount: 10k, Credit: 2k, Duration 6 days | Borrowed

Loan amount: 5k, Credit: 700, Interest: 100, APY: 4.3% | Repaid

Loan amount: 50k, Credit: 8k, Outstanding: 2 days | Redeemed



Preview – Web3 Reputation/Credit Profile & Oracle

Reputation Oracle:

- Aggregation of web3 native social graphs, verifiable credential associated with DIDs, cross-chain assets, LP positions, cash flow, and loan history to generate a credit/reputation score.
- Acts as anti-Sybil mechanism. Attackers will not be able to maliciously default multiple times.

Gamified Incentive:

- Borrower always starts with overcollateralized position (120%), only as borrower maintains healthy position, protocol then gradually lowers collateral ratio (e.g. 100% -> 90% -> 70%).
- Built in leaderboard to identity most reputable borrowers & investors.

Social Recourse:

- Sybil and malicious accounts are deny-listed and published on the front end and exported via Chainlink Oracle for other protocols to consume.

We are committed to building anti-Sybil & reputation public goods & infrastructure for Web3.

Preview - Marketplace – Borrowing Lending

ORMI Dashboard Profile Markets More ••• oxfo..9873

Credit Score 2.00 SCORE DETAILS

Health factor 50.79 RISK DETAILS

Net worth $620.78

Net APY -31.46 %

Your supplies

Hide —

Balance $ 630.72 | APY 0 % | Collateral $ 630.72

Assets	Balance	APY	Collateral		
DAI	600.00 $ 600.83	0 %		Withdraw	Supply
ETH	0.0100000 $ 29.90	0 %		Withdraw	Supply

Assets to supply

Hide —

Show assets with 0 balance

Assets	Wallet balance	APY	Can be collateral		
UNI	1,000.00	0 %	✓	Supply	Details
BUSD	10,000.00	0 %	—	Supply	Details
DAI	8,900.00	0 %	✓	Supply	Details

Your borrows

Hide —

Balance $ 9.95 | APY 1,963.00 % | Borrow power used 2.10 %

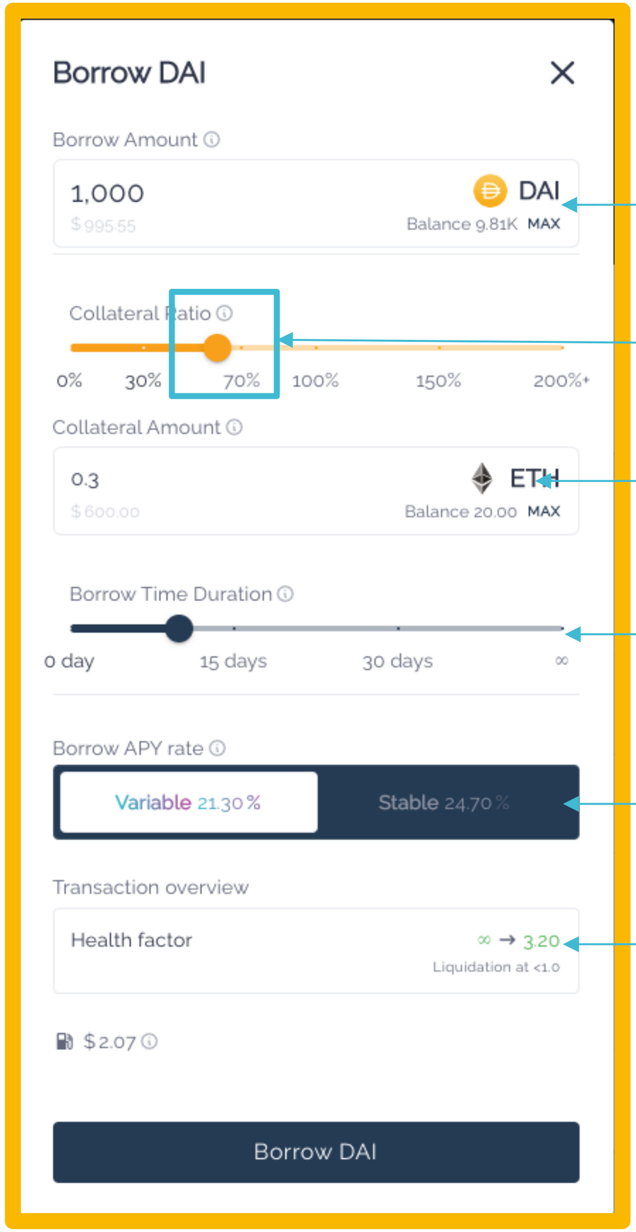
Assets	Debt	APY	APY type		
ZRX	10.50 $ 9.95	1,963.00 %	VARIABLE	Repay	Borrow

Assets to borrow

Hide —

Assets	Available	APY, variable	APY, stable		
DAI	459.31	< 0.01 %	3.98 %	Borrow	Details
ETH	0.1538460	0 %	3.05 %	Borrow	Details
ZRX	0.0792000	1,963.00 %	2,090.57 %	Borrow	Details

Preview – **UNDER-** collateralized Borrowing



Borrow Amount: $1000 DAI

Borrower picked 60% collateral ratio (CR) to back the loan. Borrower must maintain this minimum CR to avoid liquidation. | **<u>Undercollateralized</u>**

Based on the above CR, user must set this amount of collateral aside for a loan.

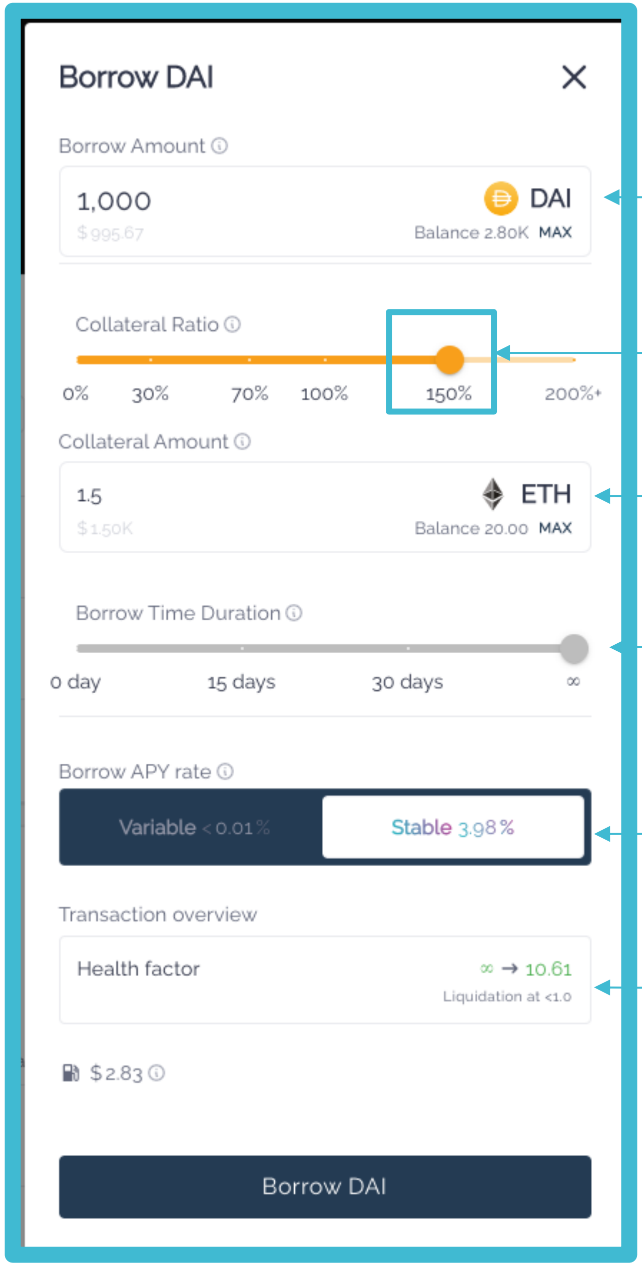
- The longer the borrow time duration, the higher the interest rate.
- Borrower must repay back the loan before term ends to avoid liquidation.

Note: for undercollateralized lending, user is not allowed to take a loan out indefinitely (∞)

- Undercollateralized positions typically have higher interest rates.

- Health factor indicates how healthy a user's lending position is. Historically low health factor impacts overall credit score.

Preview – **OVER-** collateralized Borrowing



Borrow Amount: $1000 DAI

Borrower picked 150% collateral ratio (CR) to back the loan. | **Overcollateralized**

Based on the above CR, user must set this amount of collateral aside for a loan.

Overcollateralized loan is hard-coded to indefinite (∞) duration. Borrower does not need to pick duration.

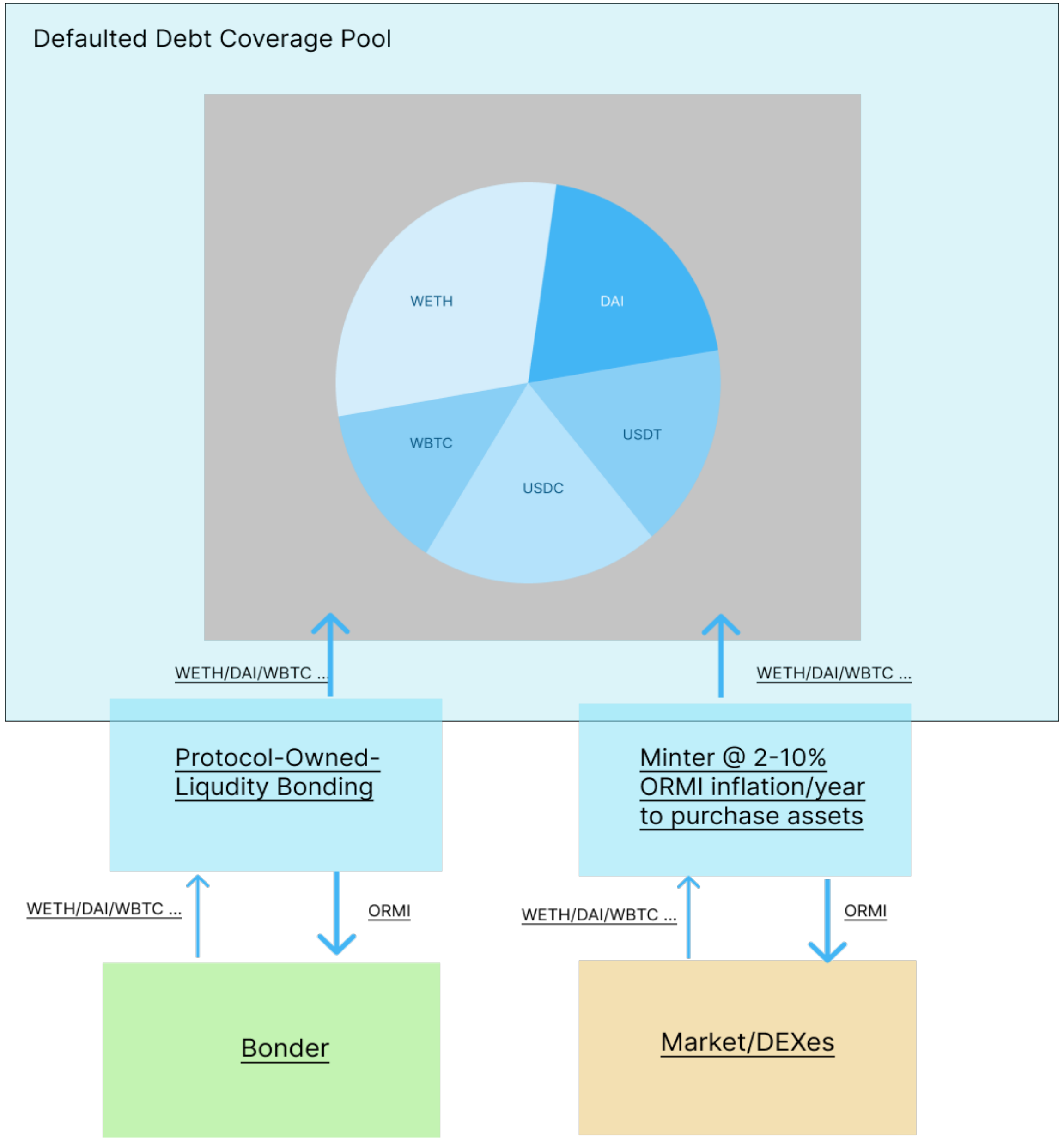
Overcollateralized positions typically have lower interest rates.

Overcollateralized positions typically result in higher Health factor.

Handling defaulted debt - Coverage Pool

- Protocol upfronts calculates how much defaulted debt it can tolerate based on the coverage pool's assets, and only allows total undercollateralized positions based on coverage pool's health.
- Defaults completely covered by protocol. Lender bears little default risk.
- Coverage Pool treasury is accrued via Protocol-Owned-Liquidity Bonding and controlled inflation of $ORMI to purchase assets.

$$invariant: \sum defaultedDebt < DebtCoveragePool$$

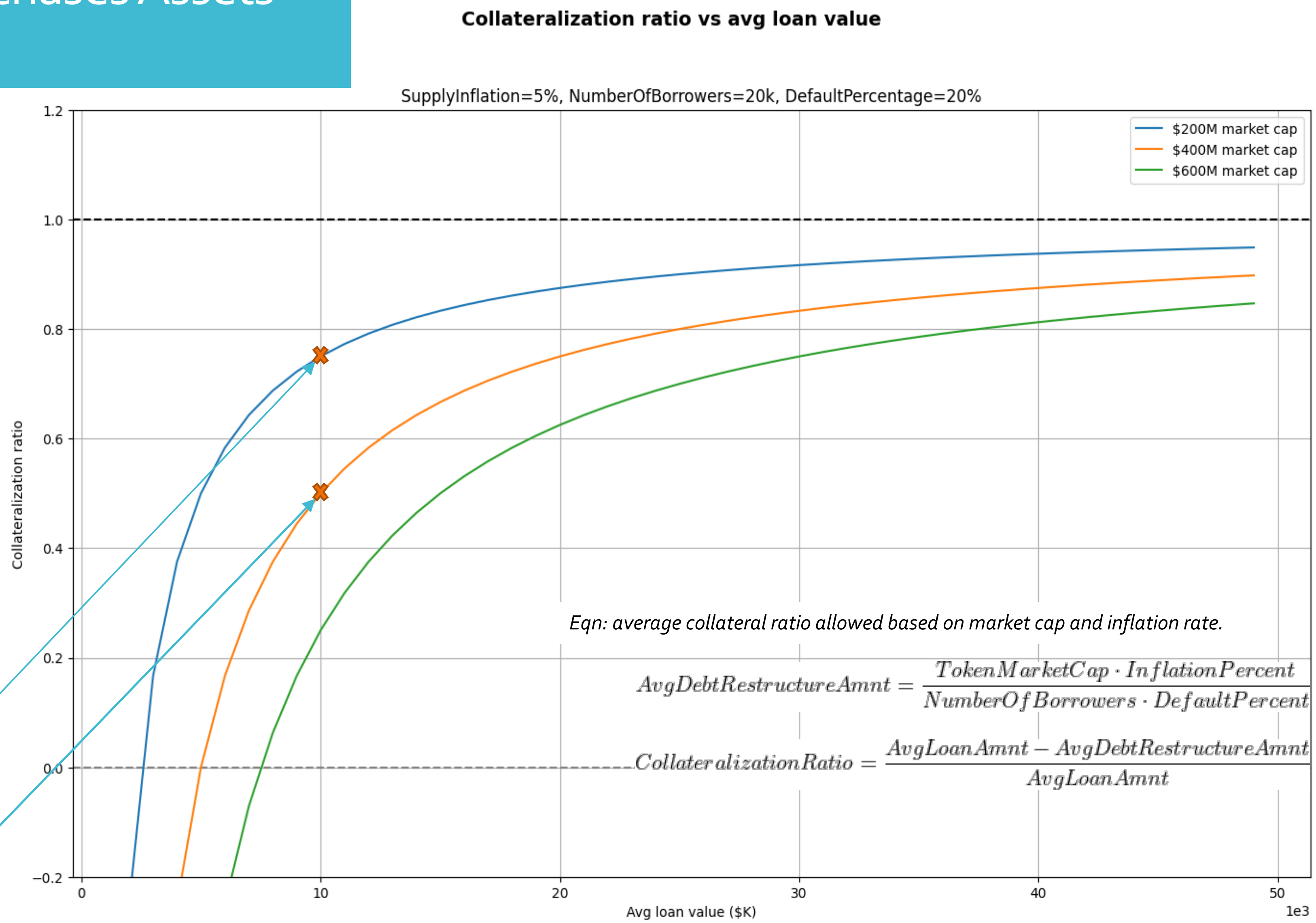


Coverage Pool – Minter Purchases Assets Sustainably

- Aave (9% inflation), Compound (4% inflation) all have inflationary token supply.
- ORMI's Minter inflates $ORMI supply by 2-10% a year to purchase assets from open market for coverage pool.
- The Minter only inflates supply when the market condition is benign to avoid downward price impact.

| $200M market cap | 5% supply inflation | avg $10k loan | 20k borrowers | => **everyone gets close to 80% min collateral ratio!**

| higher market cap | 5% supply inflation | => **even smaller min (~50%) collateral ratio!**



Eqn: average collateral ratio allowed based on market cap and inflation rate.

$$AvgDebtRestructureAmnt = \frac{TokenMarketCap \cdot InflationPercent}{NumberOfBorrowers \cdot DefaultPercent}$$

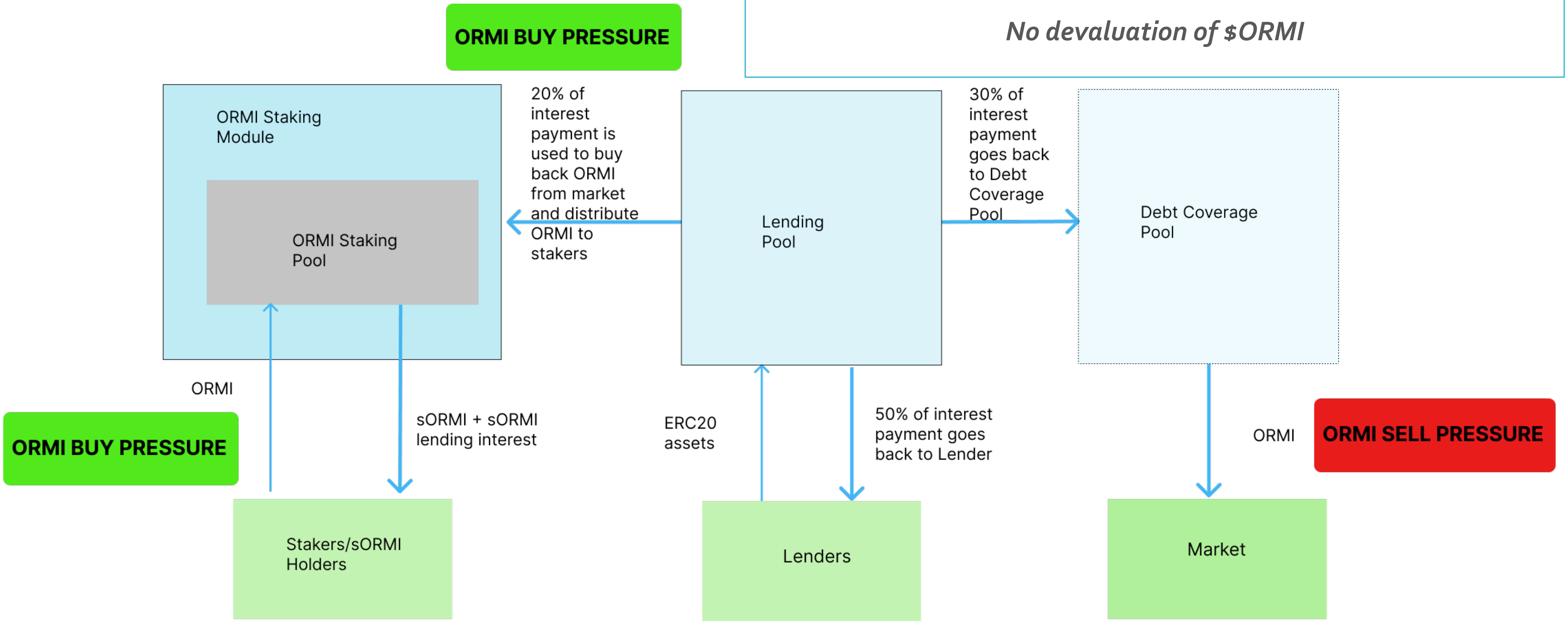
$$CollateralizationRatio = \frac{AvgLoanAmnt - AvgDebtRestructureAmnt}{AvgLoanAmnt}$$

Handling defaulted debt – why it is sustainable

- Protocol maintains buy pressure on $ORMI via utilizing interest payment to buy back $ORMI and Vote Escrowed (veToken) mechanism to encourage staking and earn cashflow.
- Protocol always maintains the invariant that sell pressure (ORMI emission for debt coverage pool) is less than buy pressure.

$$invariant: \sum sellPressure \leq \sum buyPressure$$

No devaluation of $ORMI



FAQs – On ORMI's Debt Management Mechanism

1. What if an attacker has multiple fake accounts and try to take out undercollateralized loans (Sybil Control)	• Ormi's reputation oracle aggregates on-chain reputation, assets, LP positions, etc. These are 'hard-to-forge' resources that attackers will not be able to successfully replicate consistently. • Ormi keeps track of deny-listed and Sybil accounts/associations and publish them openly and export them via Chainlink Oracle for other protocols to consume.
2. What incentives someone to pay back the undercollateralized loan?	• Positions will be partially collateralized with slashing penalty. • Borrower is only gradually allowed undercollateralized positions after borrower has maintained healthy overcollateralized positions with Ormi in order to earn undercollateralized privilege. • Also see answer to question #1.
3. What happens to defaulted debt?	• Ormi allows defaulted borrower to pay back the debt to restore borrower's reputation. • If defaulted debt is not restored, Ormi's debt coverage pool steps in to fulfill the deficit.
4. How is the debt coverage pool sustainable and its impact on $ORMI price?	• Ormi carefully maintains buy and sell pressures of $ORMI. While $ORMI is given out in exchange for debt coverage pool assets (sell pressure). The interest payment from lending and staking module act as buy pressure to reduce supply of $ORMI on the market. • $ORMI's inflation rate is dynamic based on market condition. • There is never the risk of hyperinflation of $ORMI to cover defaulted debt.
5. What happens when default pool is empty or low on assets.	Ormi no longer allows any undercollateralized positions. Everyone need to overcollateralize.
6. What happens when market crashes & $ORMI has a massive sell-off.	Ormi no longer allows any undercollateralized positions. $ORMI price does not have an impact on overcollateralized lending's functionality.

Summary: The actual borrower's undercollateralized position will be based on the existing market condition & the effectiveness of Ormi's reputation oracle. The fallback is always overcollateralization to ensure LPs and $ORMI holder's funds safety.

Founder Profile

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Join Us!

Ormi Finance | The decentralized credit protocol for the Metaverse

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