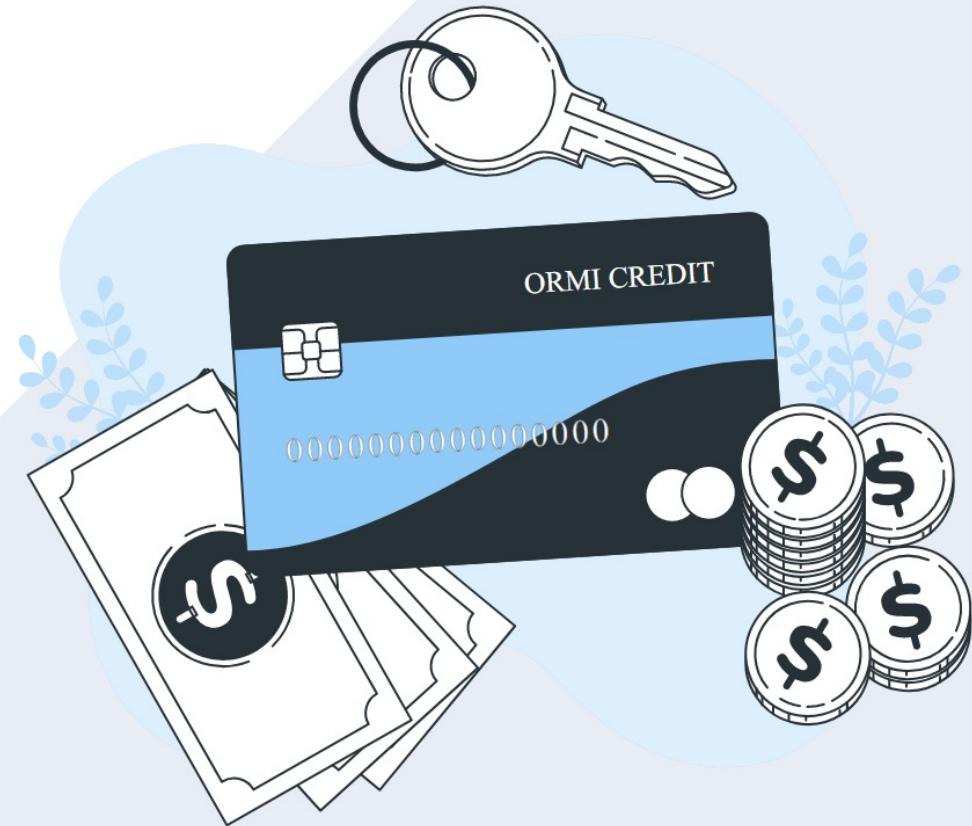


The Decentralized Credit Protocol

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](#)

Ormi

The Decentralized Credit Protocol

<https://ormi.fi>

Mission

- Permissionless decentralized credit protocol for issuing undercollateralized loans/credit to anyone without relying on real world identities or KYC.

Problem

- DeFi liquidity/lending protocols (e.g. Aave¹, Compound², MakerDAO³) require 100%+ (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 inefficiency.

1. [Aave – Open Source DeFi Protocol](#)

2. [Compound](#)

3. [MakerDAO | An Unbiased Global Financial System](#)

Ormi's innovation

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

Preview - Lending Pool

ORMI Dashboard Profile Markets More ...

Ethereum Market ▾

Credit Score 2.00 SCORE DETAILS

Health factor 50.79 RISK DETAILS

Net worth \$620.78

Net APY -31.46%

Your supplies

Balance \$630.72 APY 0% Collateral \$630.72

Assets	Balance	APY	Collateral
DAI	600.00 \$600.83	0 %	<input type="button"/> Withdraw <input type="button"/> Supply
ETH	0.010000 \$29.90	0 %	<input type="button"/> Withdraw <input type="button"/> Supply

Assets to supply

Show assets with 0 balance

Assets	Wallet balance	APY	Can be collateral
UNI	1,000.00	0 %	✓ <input type="button"/> Supply <input type="button"/> Details
BUSD	10,000.00	0 %	— <input type="button"/> Supply <input type="button"/> Details
DAI	8,900.00	0 %	✓ <input type="button"/> Supply <input type="button"/> Details
ETH	0.1936917	0 %	✓ <input type="button"/> Supply <input type="button"/> Details

Your borrows

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 <input type="button"/> Repay <input type="button"/> Borrow

Assets to borrow

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

Preview – Web3 Native Credit Profile

vfei.eth



0xf03e58...eaa89873 🔒
did:3:kjzl6c...gnzaglo6 🔒

2 trophies, 1102 days active, oxfeiprotocol, victorfei, Email Verified

Following 12K, Followers 135, TVF \$250,145.566 ?

Credit Score 2.00, Health factor 49.01, Max Collateralized Borrowing Limit \$40.00K

Max Credit Limit \$10.00K, Total Borrowing Limit \$50.00K

...

+ Follow

Total Assets Summary

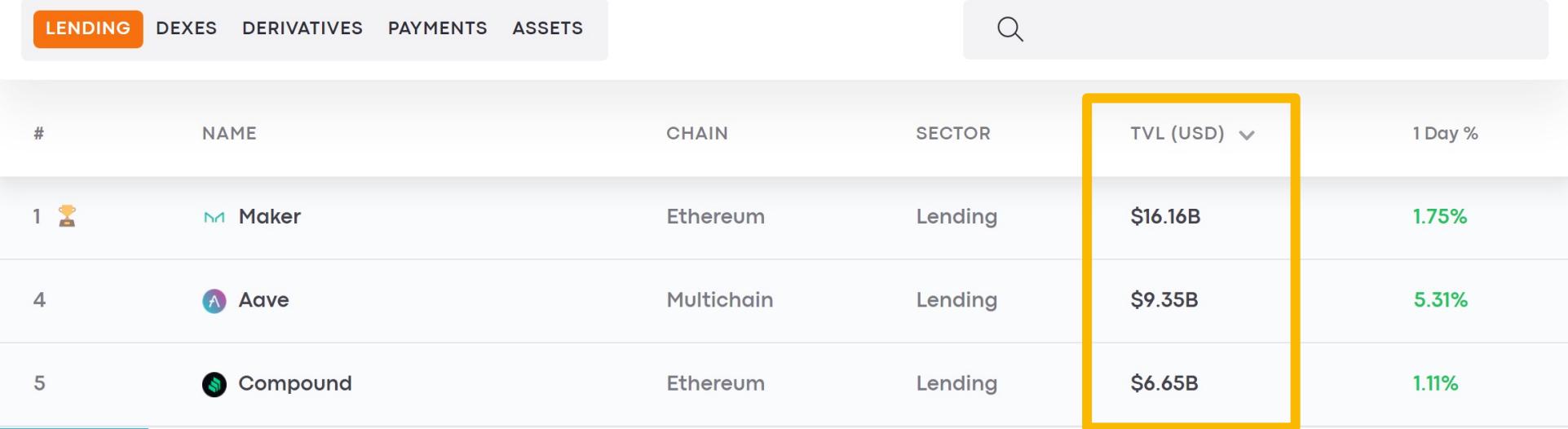
 on Ethereum	\$20.00K
 on Polygon	\$30.00K
 on Avalanche	\$15.00K
 on Arbitrum	\$5.00K
 on Harmony	\$6.00K

Wallet: \$15K, Frax: \$25K, Fei: \$15K

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

Market



The screenshot shows a table from the DeFi Pulse website ranking lending protocols. The columns are: #, NAME, CHAIN, SECTOR, TVL (USD), and 1 Day %. The top three entries are highlighted with a yellow border around the TVL column.

#	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](#)

- As of Feb. 2022 (DeFi bear market), top 3 overcollateralized lending protocols have combined liquidity/value locked of \$32 Billion¹
- Ormi's goal: to capture all \$32 Billion liquidity and beyond.

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.

Founder Profile



Victor Fei, Founder @ Ormi Finance

- Microsoft, Software Engineer 
- Chromium, Committer 
- Cornell University B.S.'15, M.Eng.'16 
- Twitter: [@oxfeiprotocol](https://twitter.com/oxfeiprotocol)
- LinkedIn: [in/victorfei](https://www.linkedin.com/in/victorfei)

Technical Overview

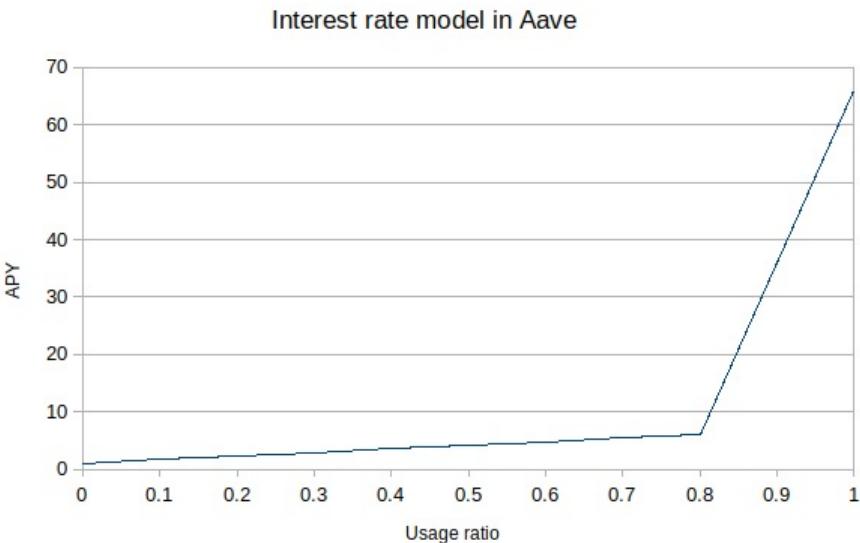
Ormi | The decentralized credit protocol

How does existing overcollateralized lending work. - Aave



Every lending system has two components:

- **How to secure the loan:**
 - Overcollateralization
 - If collateral's value falls below loan value, collateral gets liquidated.
- **How to provide liquidity:**
 - Kinked interest rate model
 - Low liquidity/high utilization ratio = high interest rate/APY.
Incentivizes users to provide liquidity for yield.



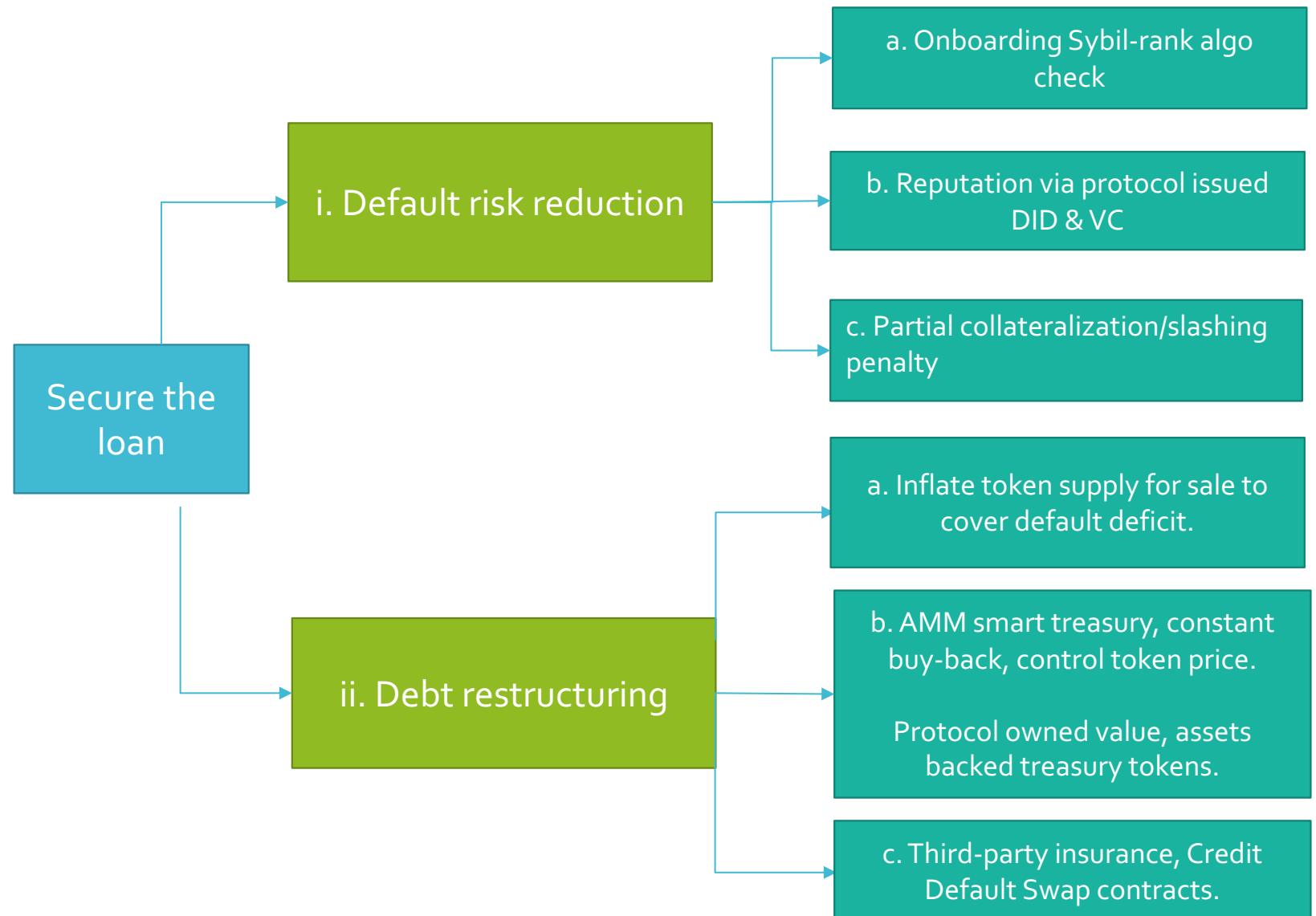
How does Ormi secure undercollateral- ized loan



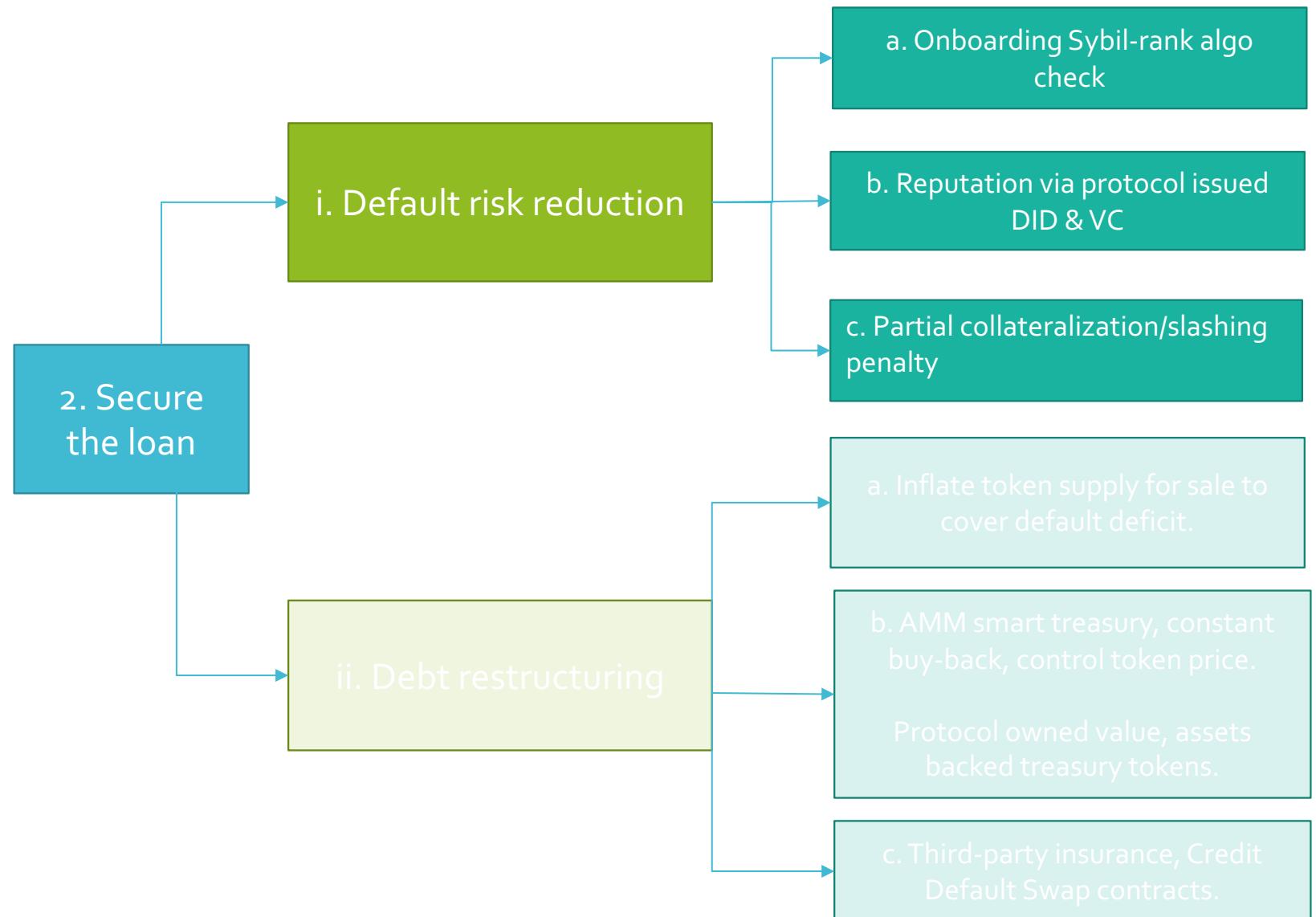
Two key issues every undercollateralized loan system needs to address:

- 1. Default risk reduction:**
 - 1.** Sybil-control: eliminate the scammers
 - 2.** Reputation, credit-worthiness.
- 2. Debt restructuring**
 - 1.** If someone defaults, how do you recover the loss.

How does Ormi secure undercollateralized loan



Default risk reduction – Anti-sybil onboarding



Default risk reduction – Anti-sybil onboarding



Anti-Sybil onboarding

1. Proof of hard-to-forge resource, i.e. half a year of transaction history
2. Ethereum address with favorable interaction with existing DeFi protocol will result in lower collateralization ratio initially.

Default risk reduction – Reputation via DID & VC



Ormi Decentralized Identifier & Verifiable Credential

1. DID built on top of Ceramics Networks 
2. Ormi issues its own Verifiable Credential acts as loan history associated with a DID.
3. Tamper-proof, privacy preserving.

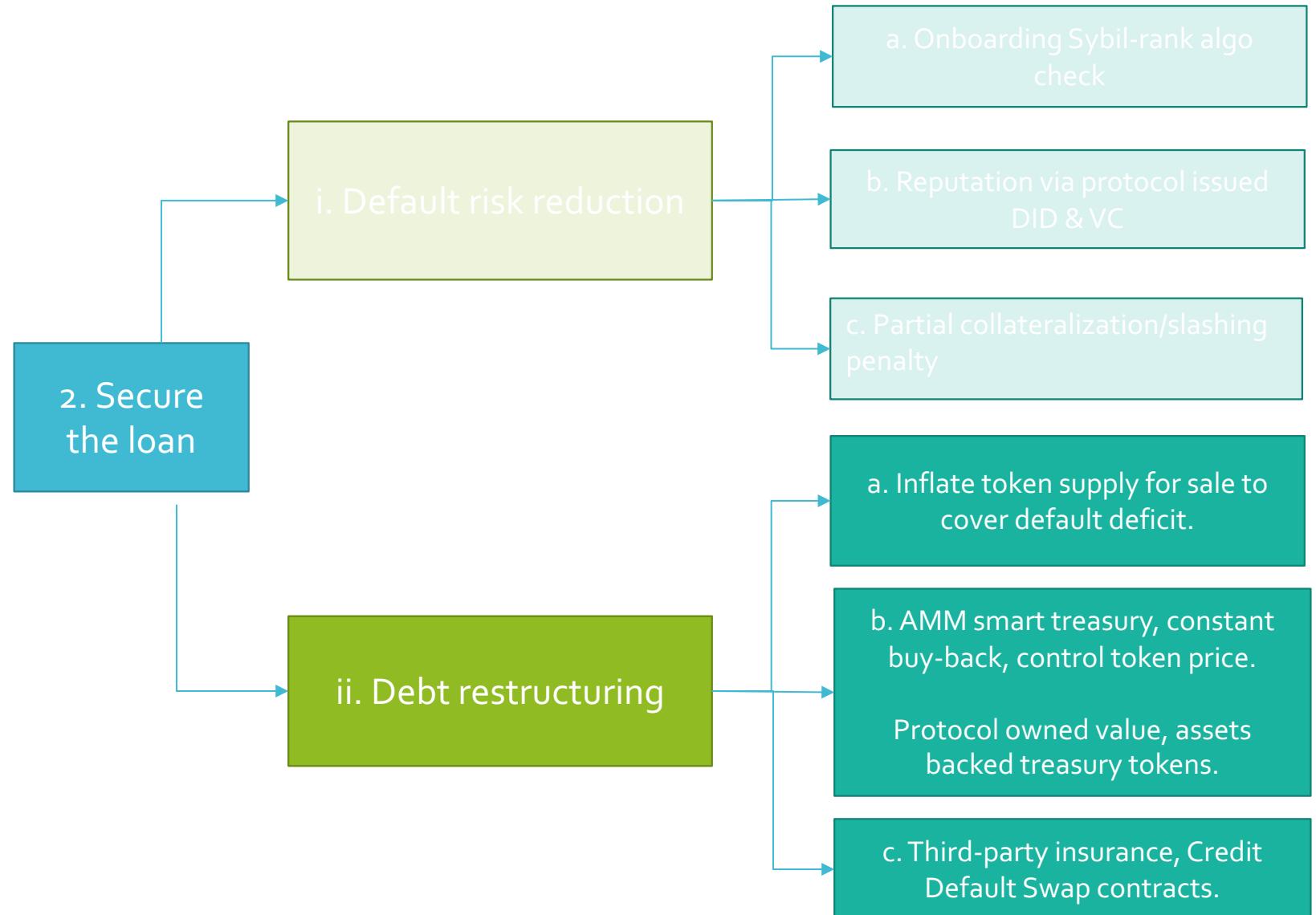
Default risk reduction – Partial collateralization



Dynamic incentives for borrowers to stay honest

1. A User/DID starts with 100% collateralization ratio, after each complete loan repayment or favorable loan activity, CR gradually and **linearly reduces** to 90%, 80% ... 30%, etc.
2. In the event of liquidation or defaults, a DID's collateralization ratio requirement increases.
3. A User/DID's CR decreases linearly upon favorable behavior and **increases exponentially** upon unfavorable behavior.

Debt restructuring – Inflate supply



Debt restructuring – Inflate Supply



Inflate token supply to cover debt default

1. Ormi treasury issues additional governance/treasury tokens to be sold on DEXs to raise fund.
2. Target inflation 2%->8%.
3. Ormi smart treasury has mechanism to ensure treasury token unit price does not depreciate given target inflation.

Inflation without devaluation!

Debt restructuring – Inflate Supply



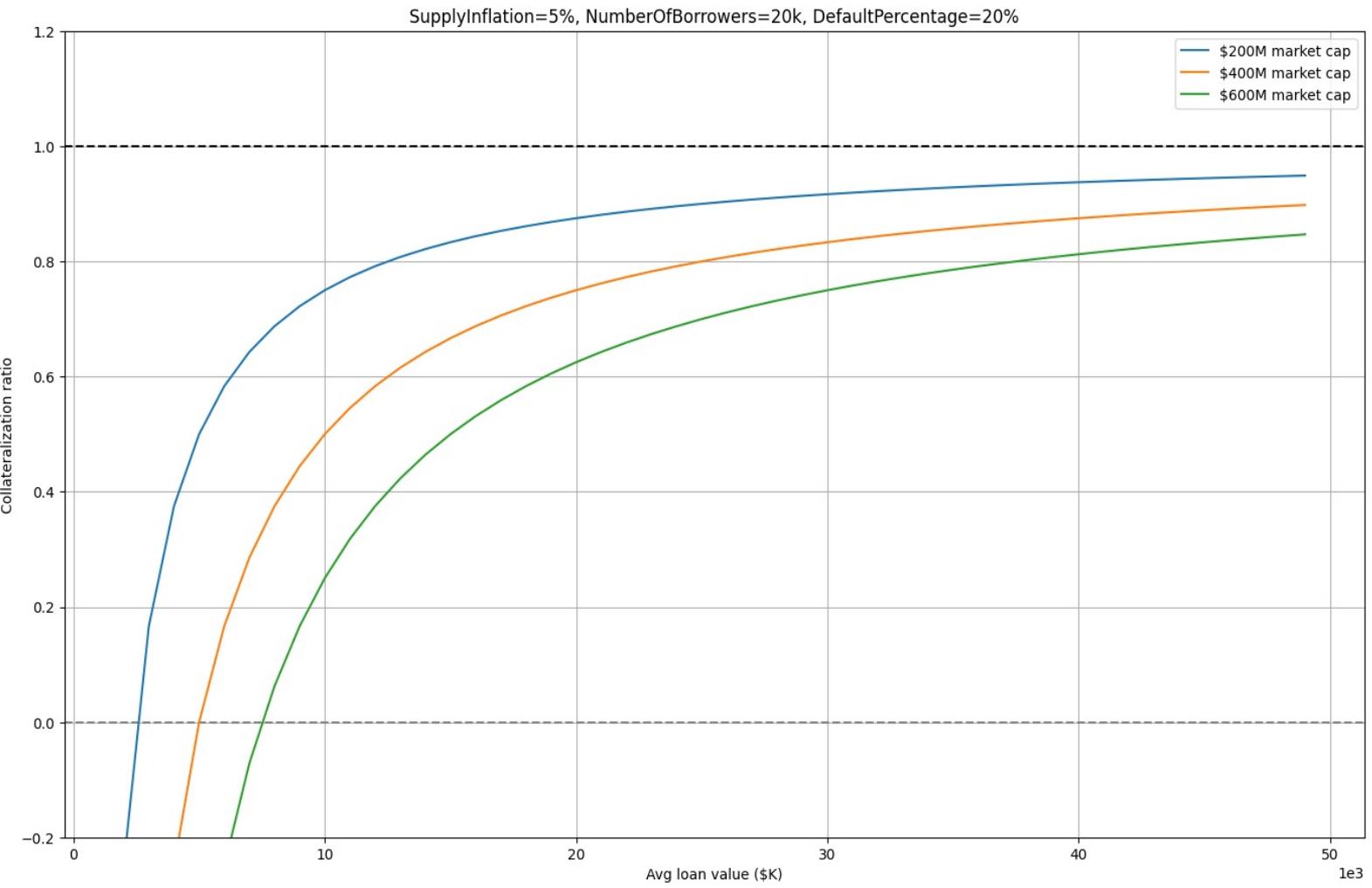
Inflate token supply to cover debt default

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

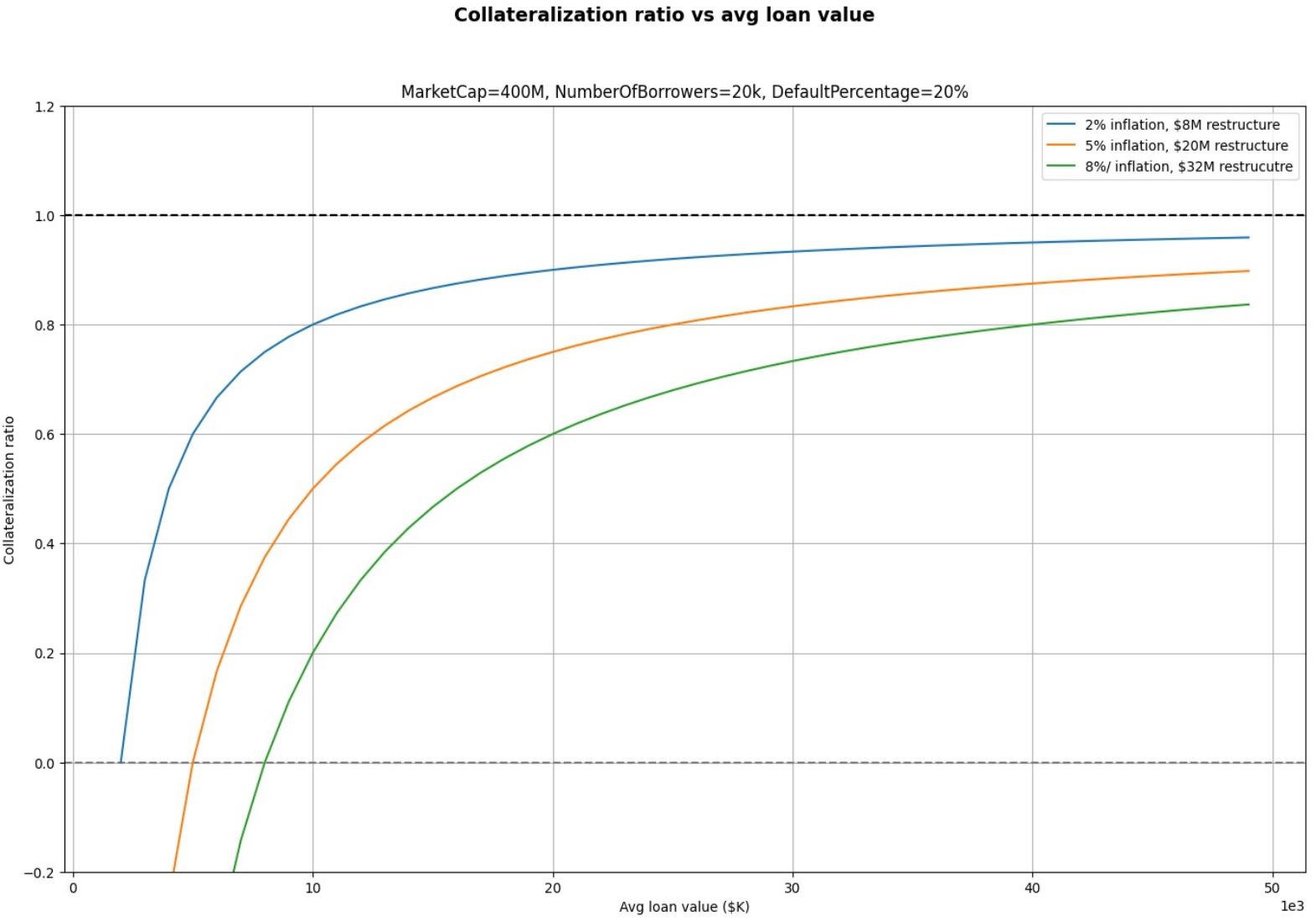
$$CollateralizationRatio = \frac{AvgLoanAmnt - AvgDebtRestructureAmnt}{AvgLoanAmnt}$$

Debt restructuring - Inflate Supply

Collateralization ratio vs avg loan value



Debt restructuring – Inflate Supply



Debt restructuring – Smart Treasury



Smart treasury for constant buy-back, token price control.

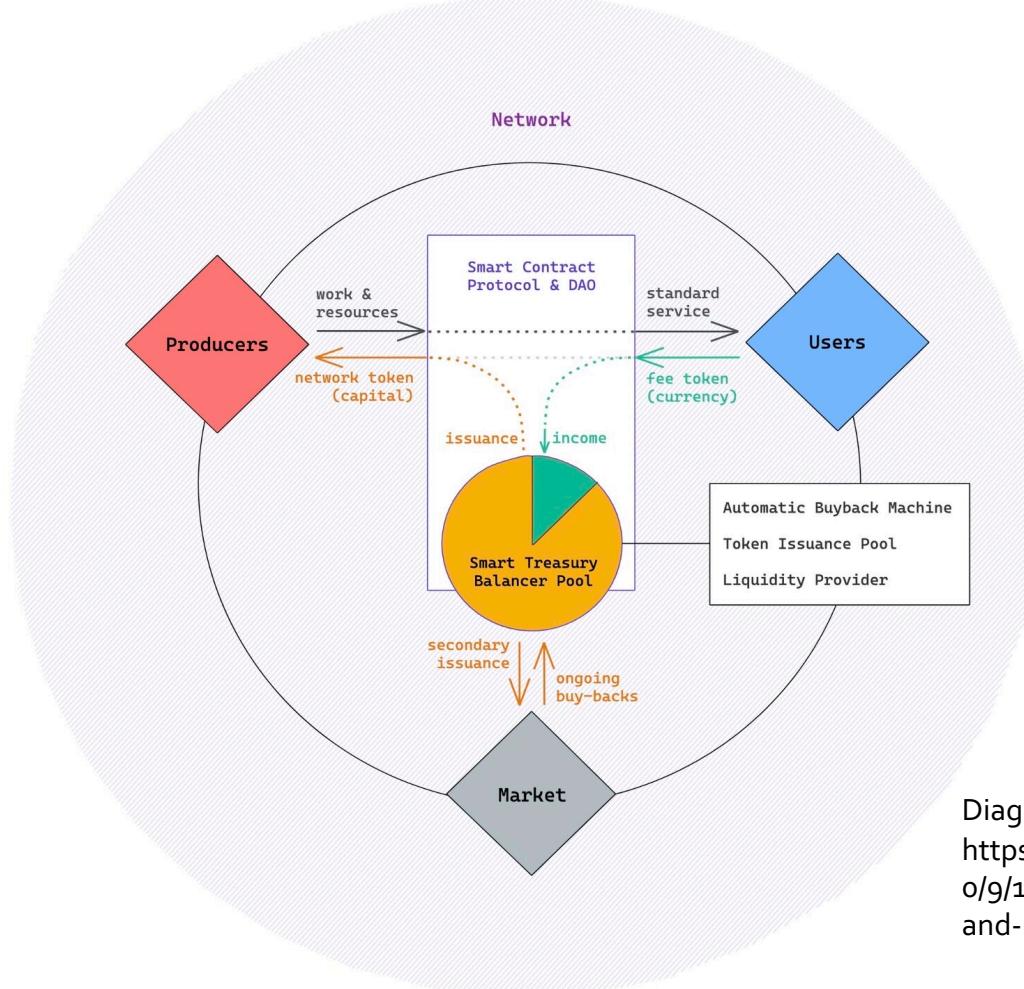


Diagram source:
<https://www.placeholder.vc/blog/2020/9/17/stop-burning-tokens-buyback-and-make-instead>

Debt restructuring – Smart Treasury



Token price control - Smart treasury for constant buy

1. Utilizes existing AMM, Balancer pool with 80%ORMI/20% ETH allocation.
2. Balancer Smart Pool ensures automatic buy-back from market. More efficient than buy-back and burn.
3. Backstop Module, prevents excess flow of ORMI into the open market that would further reduce the value of ORMI itself.

Debt restructuring – Protocol owned value



Token Price control - protocol owned value, assets backed ORMI treasury tokens

1. Protocol owned value/liquidity, based on OlympusDAO¹.
2. Bonding for treasury to accrual asset in exchange for ORMI.
3. Staking ORMI reduces supply on the market.

ORMI tokens are always backed up by assets in the treasury, enabling a **floor price** based on treasury assets to further control ORMI's price during inflation/debt restructuring.

¹. [Olympus DAO | The Decentralized Reserve Currency](#)

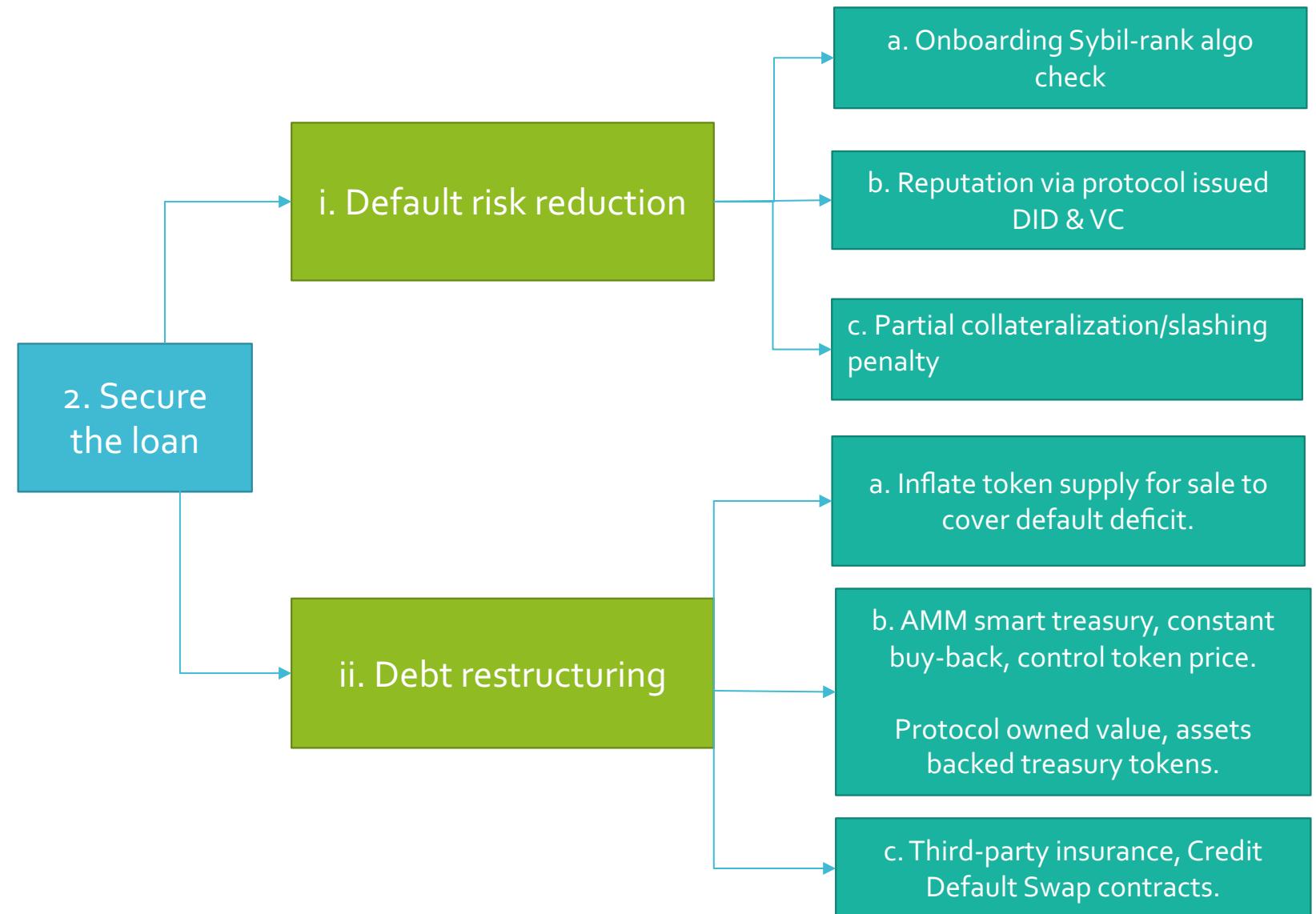
Debt restructuring – Insurance



Insurance, Credit Default Swap contracts

1. Ormi will negotiate with third-party insurance contracts for coverage on lending pools.
2. Lenders can individually opt in for insurance on their lending.

Ormi components



Find us at

<https://ormi.fi>

Alpha Testnet Release Soon

Ormi | The decentralized credit protocol