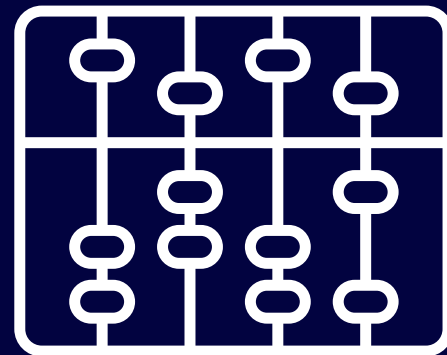




# LendBook

An order book turned into  
a robust lending protocol

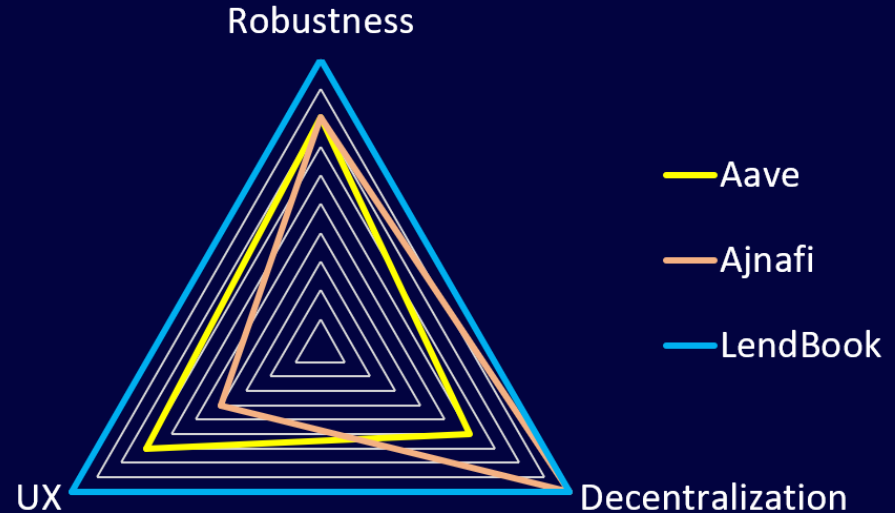


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Breaking Lab

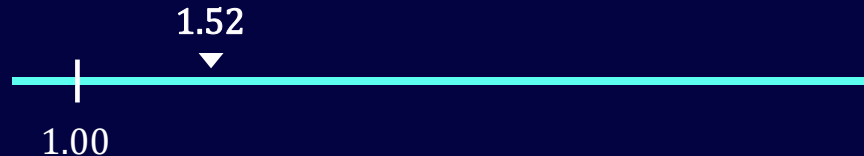
# Lending with

- Absence of bad debt risk
- Capital efficiency
- Better UX
- Minimized governance
- Full decentralization



# Users' experience in lending protocols is inefficient

- Low Loan-To-Value
- Borrowing caps
- Costly liquidation
- Whitelisted assets limited to blue chips
- Complex health factor management



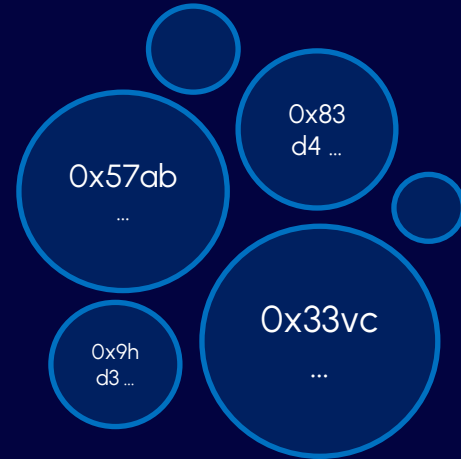
Liquidation penalty  
in Aave V3 Ethereum

Asset	Liq. penalty
ETH	5.0 %
USDC	4.5 %
ENS	8.0 %

Source: [app.aave.com](https://app.aave.com) 23/12/26

# Overgrowth of risk management puts limits to decentralization

- Aave:
  - 700+ risk parameters to oversee
  - 272 AIP the last 3 years
    - Token voters apathy
    - Governance vulnerability
    - Increasing regulatory scrutiny



Most AIP have less than 15 voters

# A common origin

Protecting lenders  
from the risk of bad debt



	TVL	Bad debt
Iron Bank	42.36M	41.08M
Inverse Finance	20.65M	15.17M
Moonwell	18.90M	10.56M
Rari (Tetrano de pool)	1.52M	0.86M
Aave	2.34B	0.5M

Source: [bad-debt.riskdao.org/](https://bad-debt.riskdao.org/) 23/12/25

# Embedding solvency in code

- → Better UX
  - No liquidation penalty
  - LTV up to 99.9%
  - High leverage
- → Clear path to full decentralization
  - No off-chain risk management
  - Minimal governance



# Lenders supply assets in limit orders

Choose a target price for liquidity

Exposed in an order book

Example: Alice deposit 30,000 USDC  
in a buy order with limit price 2000.

Supply USDC

Amount: 30,000

Limit price: 2000

Price	Amount	
1960	230,000 USDC	Buy
2000	450,000 USDC	Buy
2030		
2080	320 ETH	Sell
2120	280 ETH	Sell

# Users borrow from limit orders

## Place limit orders as collateral

Bob deposits 55 ETH as collateral in a sell order and borrows 100,000 USDC from buy orders at 2000.

### Borrow USDC

Amount:	100,000
Limit price:	2000

### Supply ETH

Amount:	55
Limit price:	2080

Price	Amount	
1960	230,000 USDC	Buy
2000	450,000 USDC	Buy
2080	335 ETH	Sell
2120	280 ETH	Sell

2

1



# Penalty-free liquidations

Borrowers' positions are liquidated when the limit orders from which they borrow are filled

Ex. cont.: The price decreases to 2000. Non borrowed USDC are bought by takers in exchange of ETH.

Collateral is transferred to makers upon liquidation

Bob's ETH collateral is transferred to Alice and other makers at 2000 as a complement to takers' ETH.

# High Loan-To-Value

The closer the limit price to market price the higher the LTV

Price	Borrowable amount	Max LTV
1700	130,000 USDC	85.0 %
2000	340,000 USDC	98.5 %
2030		
2080	280 ETH	97.6 %
2300	240 ETH	90.4 %

Max LTV buy orders: Limit price / market price  
Max LTV sell orders: Market price / limit price

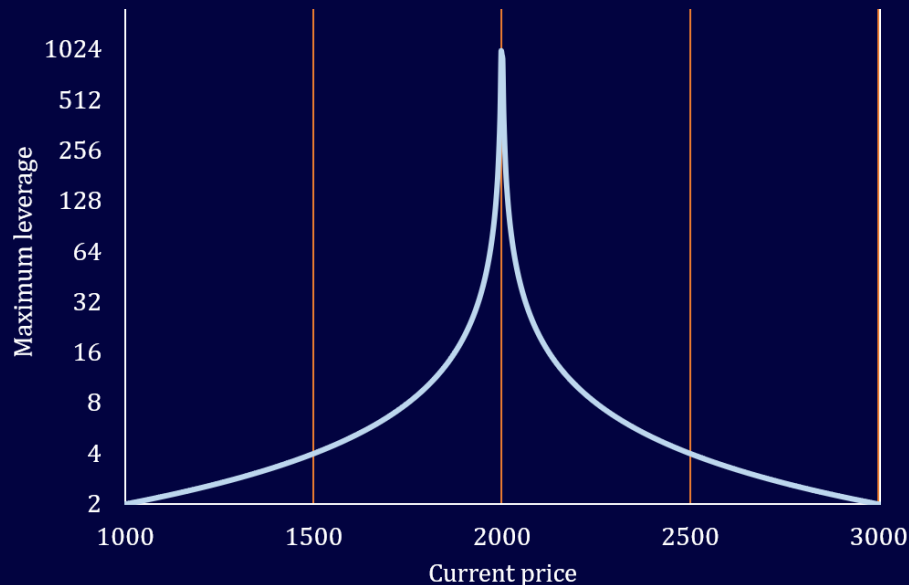
## Aave V3 Ethereum

Asset	Max LTV
ETH	80.5 %
wstETH	78.5 %
WBTC	73.0 %
USDC	77.0 %
ENS	39.0 %

Source: [app.aave.com](https://app.aave.com) 23/12/26

# High leverage

Maximum leverage and distance of limit price  
to market price (base-2 log scale)



## Aave V3 Ethereum

Asset	Max LTV	Max leverage
ETH	80.5 %	5.12 ×
wstETH	78.5 %	4.65 ×
WBTC	73.0 %	3.70 ×
USDC	77.0 %	4.35 ×
ENS	39.0 %	1.64 ×

Max theoretical leverage =  $1 / (1 - \text{LTV})$

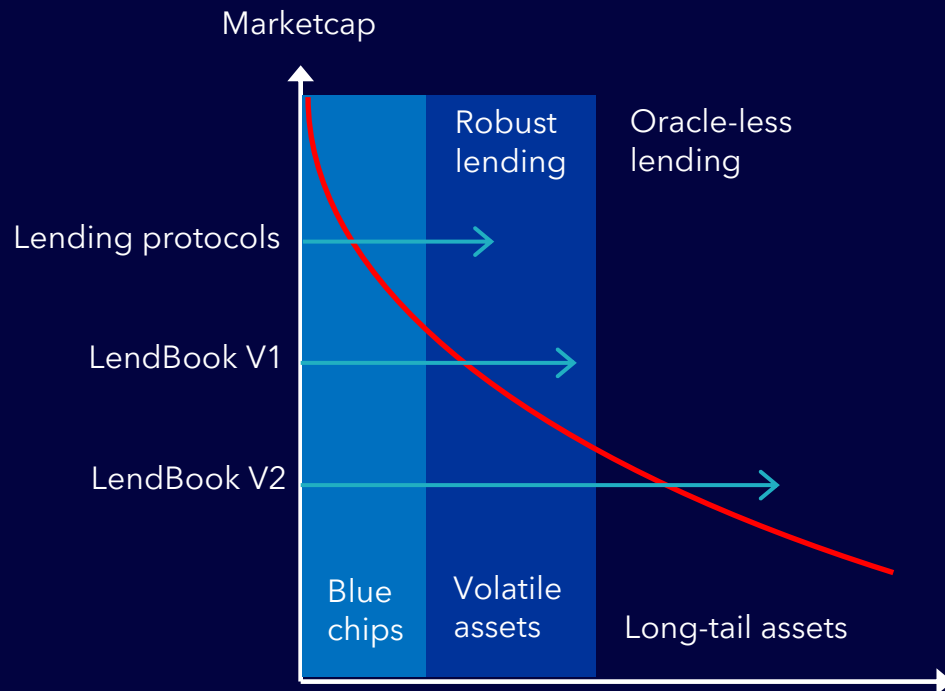
# Renewed borrowers' experience

- Intuitive debt management
- Guaranteed stop-loss and take-profit prices
- Better risk visualization



# Addressable market: volatile and long-tail assets

- Current market (21b \$ TVL)
  - blue chips
  - a few volatile assets
- Additional target markets:
  - more volatile assets
  - long-tail assets (V2)



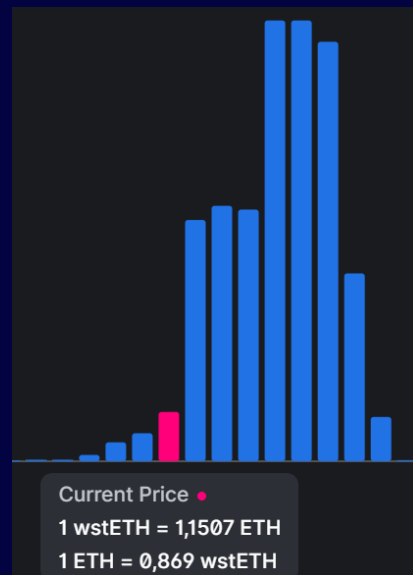
# Fit for soft-pegged and correlated assets

Price	Borrowable amount	Max LTV
<i>1.1507</i>		
1.1506	690 ETH	99.99 %
1.1505	730 ETH	99.98 %
1.1504	720 ETH	99.97 %
1.1503	1260 ETH	99.96 %
1.1502	1260 ETH	99.96 %
1.1500	1200 ETH	99.94 %
1.1499	540 ETH	99.93 %

Max LTV: Limit price / Market price



wstETH/ETH 0.01% Uniswap pool



Source: [info.uniswap.org](https://info.uniswap.org) 26/12/26



# LendBook