

DeFi Lending Protocol Analysis – AAVE

Project 6

Final presentation - Crypto Asset Analytics

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Agenda

- Introduction
- Research question
- Collected data
- Results
- Conclusion

Introduction to the project

AAVE is a decentralized liquidity protocol where users can participate as depositors or borrowers.

Value locked as of May 2022 - \$8.67 billion

Goal of the project: Understand the way the protocol works through focus on answering 3 questions

Research questions

How are the AAVE transactions distributed across different blockchains, as well as distributed in value of the transactions on a periodic basis?

How is the locked debt divided between the exposed and collateral in the corresponding contracts?

How has this market evolved over time? Can we see any trading patterns?

Data

Active deployments we analyzed:

- ETH Mainnet V2

Time frame::

- June 2021 - June 2022

Data dimensions:

- (19691, 22)

Data acquisition:

- Graph protocol

All kinds of problems with getting the data

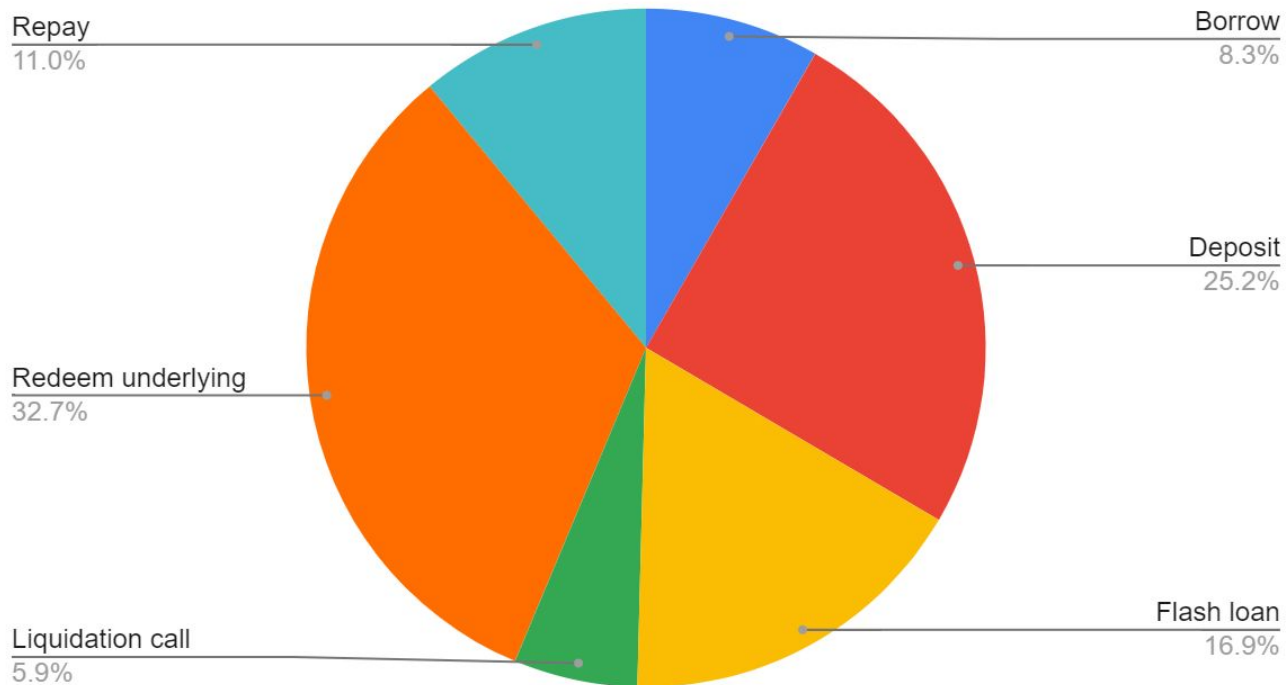
Summary of transaction types

Not accurate values**

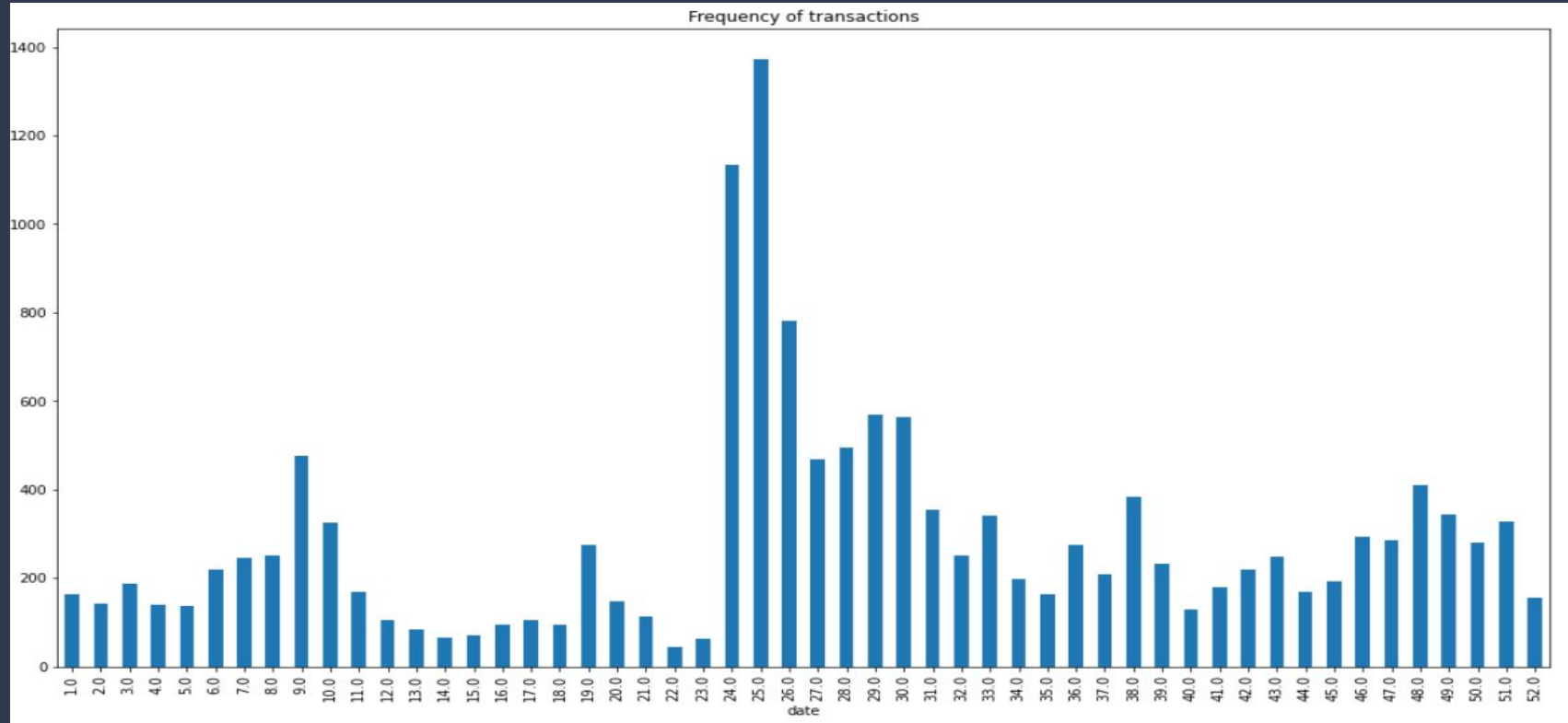
Transaction type	Occurrences	Sum (\$)	Mean value (\$)	Median value (\$)
Borrow	1472	24,262,928,068	16,434,693	0.0001
Deposit	4464	135,270,707,202	30,302,577	58.0183
Flash loan	3005	506,670,873,616	168,609,275	36,090
Liquidation call	1045	2,035,984,741, 11,383,500,053	1,948,310, 10,893,301	10,079, 0.0002
Redeem underlying	5802	375,706,492,243	64,754,652	20,489
Repay	1950	52,250,273,008	26,795,011	0.0001

Distribution of AAVE methods in chains

Distribution of AAVE methods in ETH



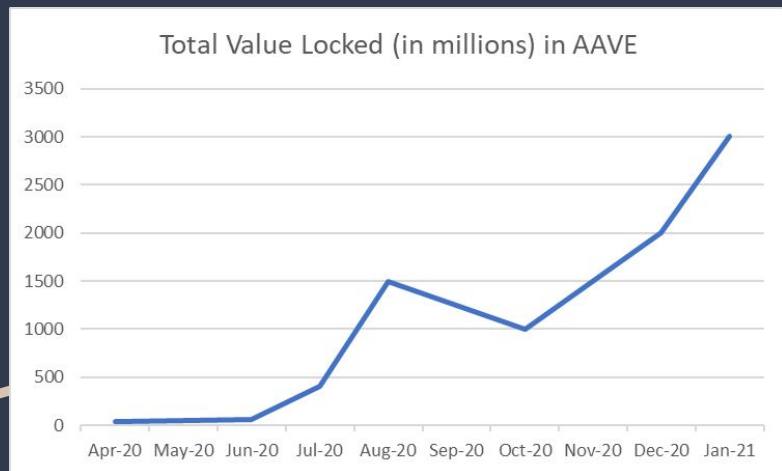
Frequency of transactions



How is the locked debt divided between the exposed and collateral in the corresponding contracts?

- Big growth in may 2020 - DeFi summer
- TVL of May 2021
 - 11.5 billion
 - 13.2 billion
 - 8.3 billion
- Percentage TVL
 - 0.6 %
- Almost all loans overcollateralized
 - Borrower supplies tokens in form of collateral that is worth more than the actual loan
 - Why do people do this?
- Borrowing amount
 - Liquidity
 - Health factor
- Exposed / Collateral percentage
 - 310 million
 - 13 billion
 - ~ 2.5 %

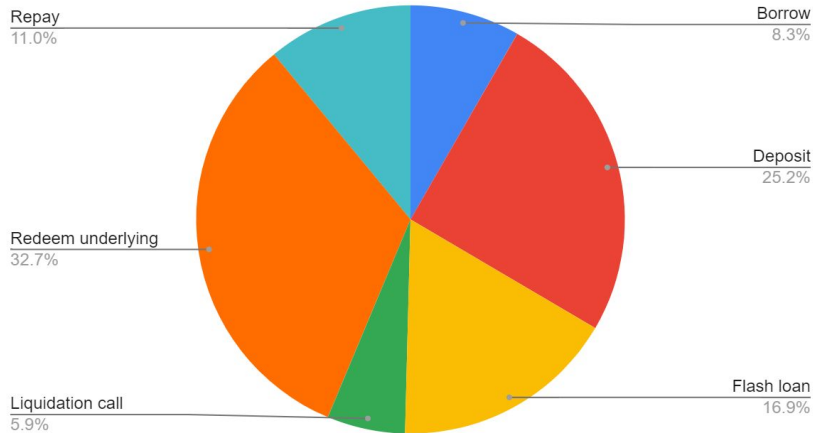
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Conclusion

Distribution of AAVE methods in ETH



Distribution of value across chains -

Locked debt divided between exposed and collateral -

How has the market evolved over time? -

Trends and patterns -

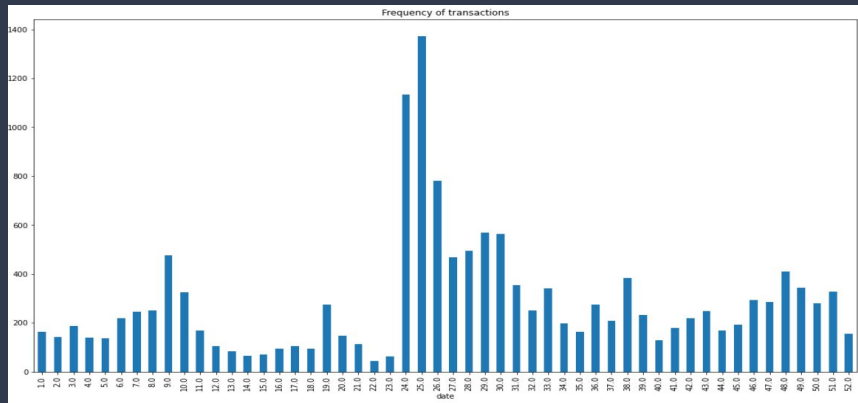
Conclusion

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Problems

How the project went

Asking questions without understanding the potential challenges

Getting data is difficult

Values written in different currencies

Lack of quality documentation

Thanks you for your attention !

Questions?