



CRYPTO PRAGMATIST PRO

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| | |
|---------------------------------|---|
| Name | Aave |
| Price | \$58.53 |
| Market Cap | \$830 million |
| Fully Diluted Market Cap | \$936 million |
| Executive Summary | <p>Aave is a non-custodial decentralized lending protocol on Ethereum, where users can come to either supply or borrow capital from asset pools.</p> <p>Lending positions are tracked via aTokens, which are interest bearing assets (these also earn a portion of Flash Loan fees). Borrowers can establish either a fixed rate or variable rate loan from the list of assets offered.</p> <p>Aave has consistently been amongst the top DeFi protocols in terms of TVL, both because of its lengthy history and the team's ability to continue to innovate and improve.</p> |
| Problem Solved | <p>Creating a lending market is one of the most important aspects to building a financial system on Ethereum (right next to exchanges). Having the ability to borrow against assets allows for people to</p> <ul style="list-style-type: none"> ● Take short positions ● Lever up on longs ● Get liquidity without selling tokens <p>In order for this protocol to grow, it will need to continue to service the needs of DeFi users. We see the focus shifting towards stablecoins and maximizing capital efficiency via high borrowing power and low interest rates.</p> |
| Tokens | <p>\$AAVE: The governance token of the Aave ecosystem allows holders to participate in the general voting regarding the direction of the protocol. Different voting topics include:</p> <ul style="list-style-type: none"> ● New assets/asset parameters ● Token incentives ● Safety module |

| | |
|--------------------|--|
| | <p>Users who post \$AAVE as collateral can also have a lower collateralization ratio and borrow a bit more than those who don't—this provides an additional incentive for holding the governance token.</p> <p>\$aTokens: As we have covered with other lending protocols, the \$aTokens here are simply claims on assets, and allow the lenders to collect interest on deposits.</p> <p>\$GHO: The project's soon-to-be-released stablecoin is mintable against collateral deposited into Aave. If you deposit an asset, you'll be able to borrow a stablecoin against the asset as well. Talk about capital efficiency.</p> |
| Terminology | <p>Safety Module (SM): The SM is a “collateral of last resort” for the protocol, creating a pool where up to 30% of the deposits can be used to cover any bad debt incurred by the protocol. The SM is comprised of the \$AAVE stakers, who earn a (current) 8.6% on their tokens for giving the protocol some wiggle room..</p> <p>Flash Loans: Flash loans are a unique product offered by Aave, allowing anyone to borrow and settle a debt with <i>no collateral</i>, as long as it is within the same transaction. This opens up many opportunities that are profitable with only a large amount of capital to be accessed by anyone.</p> |
| Founders | <p>Stani Kulechov Jordan Lazaro Gustave Mika Söyring Nolvia Serrano</p> |
| Risks | <p>In Aave, most of the risk taken on by depositors is smart contract related. With the amount of money that is sitting in the contracts at any given moment, you can be sure that there are likely black-hat groups looking for an exploit.</p> <p>With Aave v1 being around since late 2018, the Lindy effect is strong relative to other projects, and Aave is seen as a blue-chip DeFi protocol. But this does <i>not</i> exempt it from future attacks.</p> <p>Aside from SC risk, the implementation of GHO could lead to new strategies to exploit. Again, Aave has a target on its back,</p> |

| | |
|------------------------|--|
| | but the robust history and thorough audits should ease some of the smart contract risk worries. |
| Competitors | <p>Not too long ago we wrote about Euler, which is a newer lending market on Ethereum. Euler, and similar competitor Silo Finance, offer a unique advantage in their compartmentalization of asset tiers, and helping isolate specific asset risks within the protocol.</p> <p>In lending markets, there is no reason that a borrower using \$DAI as collateral should have the same borrow limits as someone using \$MANA, as \$MANA is much less liquid and much more volatile than a stablecoin. We will hash out the differences and relative advantages for these stablecoins throughout the paper.</p> <p>Aave's other main competitor is Compound, another (relatively) historic DeFi protocol on Ethereum. Aave offers some advantages in their flash loans and lower collateral requirements, but in general, the products are extremely similar.</p> |
| Documentation | Docs |
| Code Repository | Github |
| Site | https://aave.com/ |
| Social Media | Twitter Mirror Discord |

Intro

Credit markets are among the most important developments in the modern economy: allowing virtually anyone access to capital that would otherwise not be possible. The most [recent consumer credit report](#) from the United States Federal Reserve shows outstanding consumer loans at nearly \$4.7 trillion.

Contrast that to the current \$11.47 billion in DeFi (a peak of \$48b), there is undoubtedly some room for the crypto equivalent lending markets to grow. And at the forefront of DeFi sits Aave, a protocol poised to tackle this market.

A Short History

The period of Ethereum's ICO craze is by no means highly regarded by the community today. ICO's are the main point of evidence for naysayers when either attempting to destroy the validity

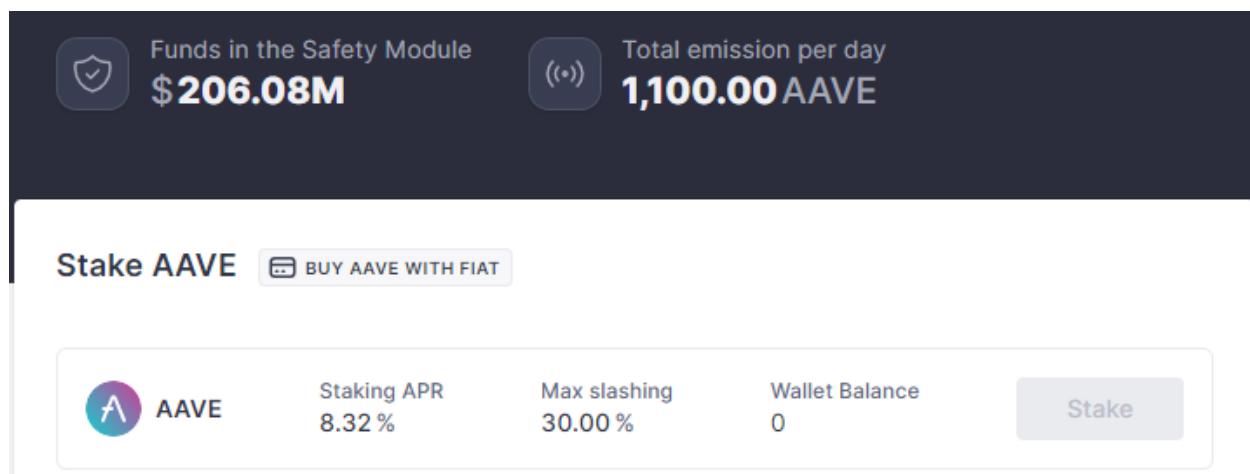
of crypto (everything is a scam, not true), or that all tokens from each new cycle will go to zero (this one is a bit closer to the truth).

But Aave has found strong product market fit for its money market products. Originally [launched as ETHLend](#) at the end of 2017 (Nov. 29th), founder Stani Kulechov brought the first peer-to-peer lending platform on Ethereum. This was truly one of the first iterations of DeFi and allowed users to collateralize their crypto assets and take out loans against them.

[Rebranding to Aave](#) almost a year later, the new whitepaper showed that this crypto credit market would use pooled lending as opposed to direct counterparties. This was huge for its development and likely helped its ability to withstand the depths of the bear market. Rather than needing to find someone to take the other side of every single loan, Aave could be a communal spot for anyone to come and go as they please.

Basic Mechanics

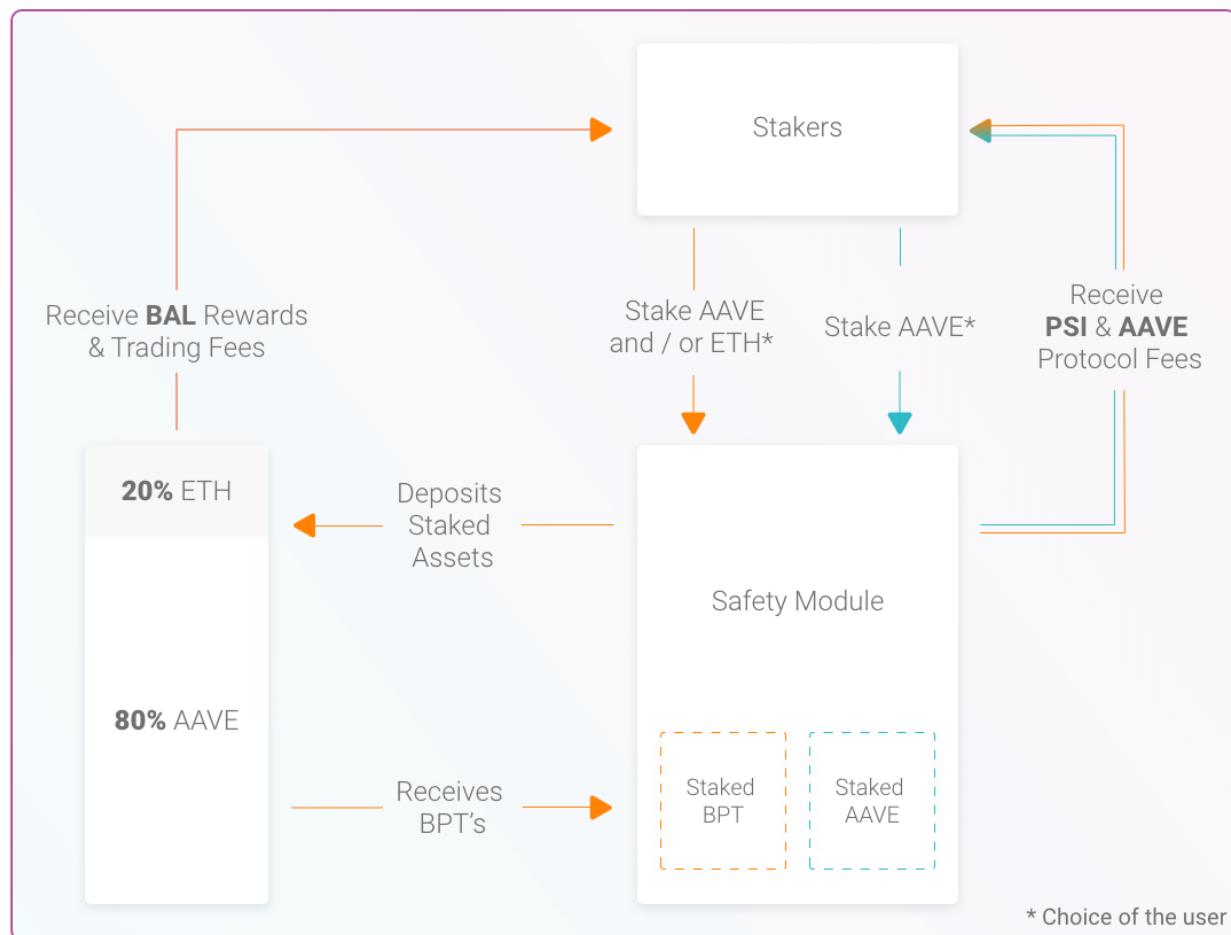
One of the critical pieces in Aave's structure is the Safety Module, which is described in our intro as the backstop for bad debt. \$AAVE is staked into the SM, and depositors earn a constant stream of \$AAVE emissions for locking up their tokens:



These emissions are distributed from the Ecosystem Reserve fund, which is a pool governed by \$AAVE holders to help incentivize LPs and the SM depositors. As seen in the picture, when you deposit \$AAVE into the contract, you are subject to a 30% slashing if bad debt is incurred. This means there is currently about **\$60M worth of \$AAVE in the SM for covering bad debt incurred by the protocol.**

When \$AAVE is deposited into the SM, the protocol will take those tokens and supply into the \$AAVE/\$ETH pool on Balancer with a respective 80/20 weight. In this, they are *essentially* holding just \$AAVE, but are able to earn trading fees along the way:

Safety Module



Aave Docs

Where things get dicey are in the scenario of a shortfall; the covering of bad debt. Below, we describe the recent attempted Aave exploit via \$CRV borrowing, and in this scenario, the SM funds would be used to help cover the losses to buy up \$CRV on market. What is *clearly not good* for \$AAVE holders, is that **\$AAVE has to be dumped on the market** for a token that has underlying mechanics which have failed (hence the bad debt). In any scenario where the protocol takes on a significant shortfall, expect \$AAVE to dump with it.

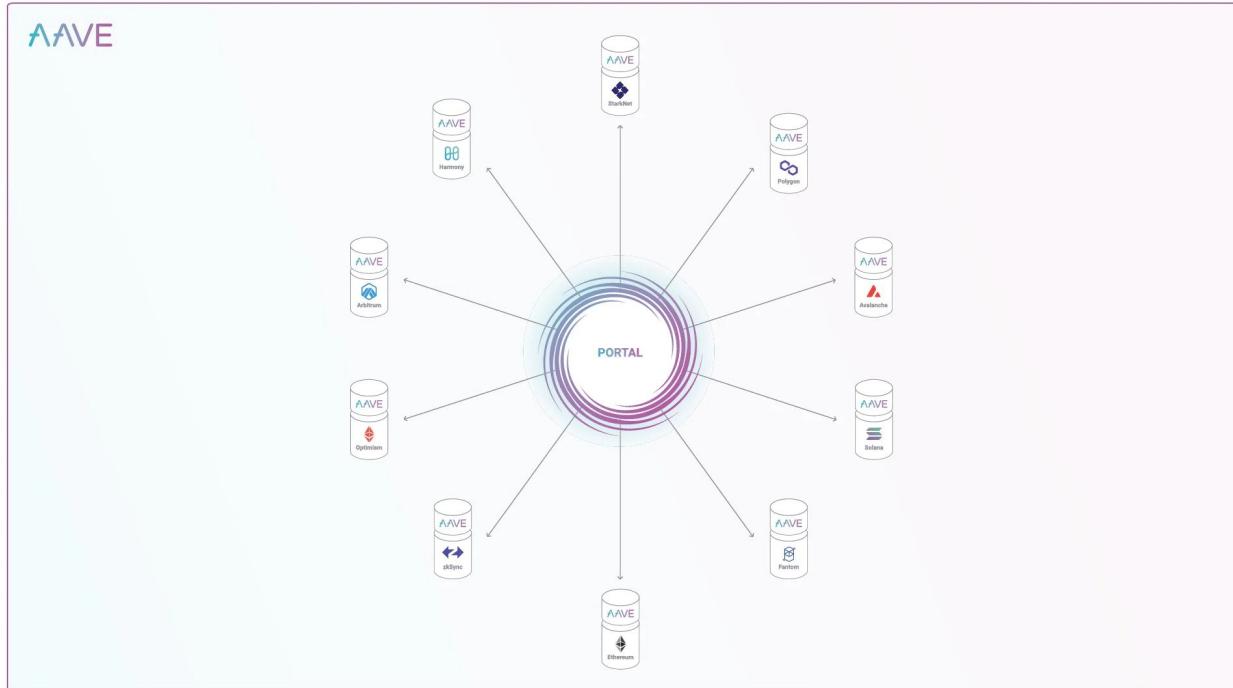
Aave v3

The protocol's newest upgrade, live in March of this year, has three key upgrades we want to highlight from the [whitepaper](#).

- Portals
- High Efficiency Mode
- Isolated Assets

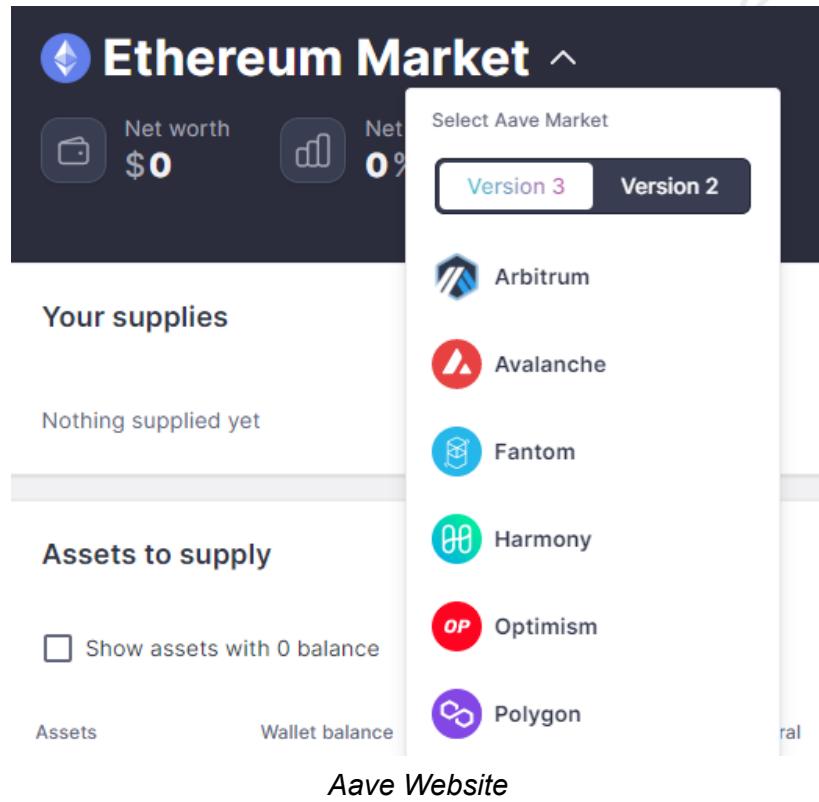
Portals

As you can probably guess, Portals refer to Aave's v3 deployment on six chains, including Arbitrum and Optimism as well as other popular L1s. By doing this, Aave allows users to simultaneously burn and mint their \$aTokens on a new chain, fully representing their original position. In this, users save time and gas fees that would normally be incurred when moving assets from one chain to another:



Aave Docs

The funds that were originally backing the \$aTokens on chain 1, are *also bridged* to chain 2, which eliminates any risk for these assets to become unbacked. These tokens can obviously only be moved to chains that Aave offers its services on, which is limited to the following at the moment:



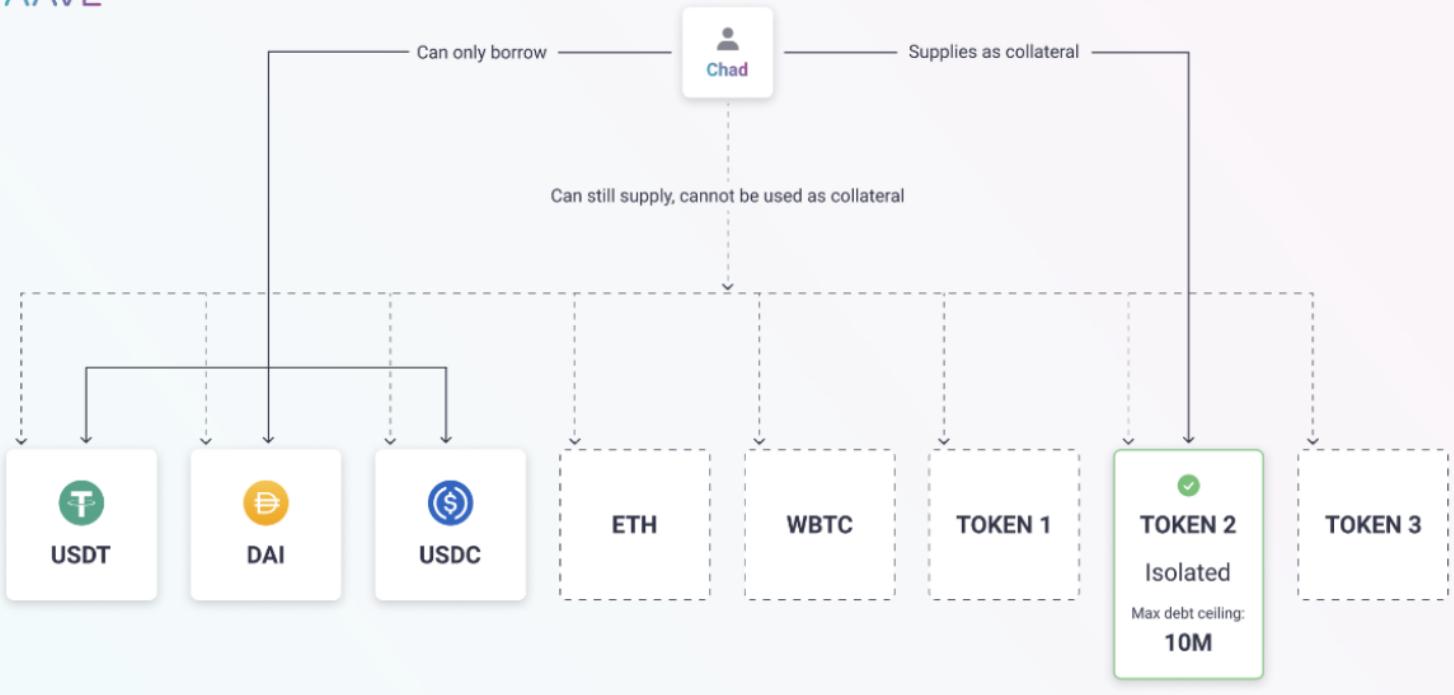
But given that the above picture shows Starknet, zkSync, and Solana, we can imagine that the cross-chain infrastructure will grow into the future. With the advent of zero-knowledge technology and rollups continuing to increase their user metrics, Portals will prove to be a crucial feature that helps contribute to the project's long-term success and profitability.

Isolated Assets

One of the main issues with legacy lending markets like Aave's is the shared pool liquidity. For example, let's suppose I go to Aave with 1 \$ETH that I want to deposit and borrow against. Under the current structure, that \$ETH collateral is valued the same as \$DAI or another stablecoin. Not only that, but the \$ETH also opens up the *entire* pool of assets on Aave. This means that all lenders across Aave are exposed to my \$ETH debt, which can clearly introduce protocol-wide bad debt, rather than asset specific bad debt.

With Isolated Pools, Aave governance can vote on assets that are higher risk and adjust parameters such as a debt ceiling. If I wanted to take out a loan against something like \$SRM, I would *only* be able to borrow a stablecoin against it, and it would be subject to a maximum amount, no matter how much of my token I supply.

AAVE



Aave Docs

This way, Aave's \$DAI depositors are protected if the \$SRM were to be classified as bad debt, and the debt ceiling protects the losses that would be incurred by the Safety Module. The rest of the protocol's creditors would also be completely separated from the risk: it would just be the pool that \$SRM can borrow against. This makes Aave an extremely relevant competitor to the innovative protocols of Euler and Silo.

High Efficiency Mode

We often talk about the idea of “capital efficiency”, which at times can sound a bit meaningless. In terms of lending markets, capital efficiency refers to how much new money you can get access to by using your current money.

For Aave, the efficiency enablement allows for tokens to be categorized with one another to *increase potential borrowing power*. For example, \$ETH and \$stETH are two highly correlated assets, constantly trading at a near 1:1 basis. Aave governance, under V3, could decide that these assets should be within the same category:

| Aave | | | | | | | |
|---|----------------------|----------------------|---|---|-----------------------|---|-----------------------|
| USDT | DAI | USDC | ETH | stETH | alETH | WBTC | renBTC |
| CF 0% LP 0% ▼ | CF 75% LP 5% ▼ | CF 80% LP 5% ▼ | CF 82% LP 5% ▼ | CF 70% LP 10% ▼ | CF 70% LP 10% ▼ | CF 60% LP 10% ▼ | CF 50% LP 10% ▼ |
|  Stablecoin eMode: CF 98% LP 1% <small>(0% for USDT)</small> | | |  ETH eMode: CF 95% LP 1% | | |  BTC eMode: CF 95% LP 1% | |
| Normal Mode eMode | | | | CF = Collateral Factor LP = Liquidation Penalty | | | |

Aave Docs

The benefit here in terms of capital efficiency is that governance can decide on the following category-specific borrowing parameters:

- LTV
- Liquidation threshold
- Liquidation bonus
- Custom price oracle

Previously, these parameters were determined at a protocol level. By creating greater customization properties, this only benefits the ability for the project to grow its market share. Our one concern with this high efficiency mode is in regards to the custom oracle.

For example, pictured above is a bitcoin category, consisting of wBTC, BTC, and renBTC. If one of these BTC products were to unpeg from the price of native BTC, this would not be reflected in the oracle price, leaving Aave holding worthless tokens. The good thing is that this oracle is optional, so unless there is an outstanding reason to incorporate it, it is likely that each asset will continue to hold its own oracle.

V3 Summary

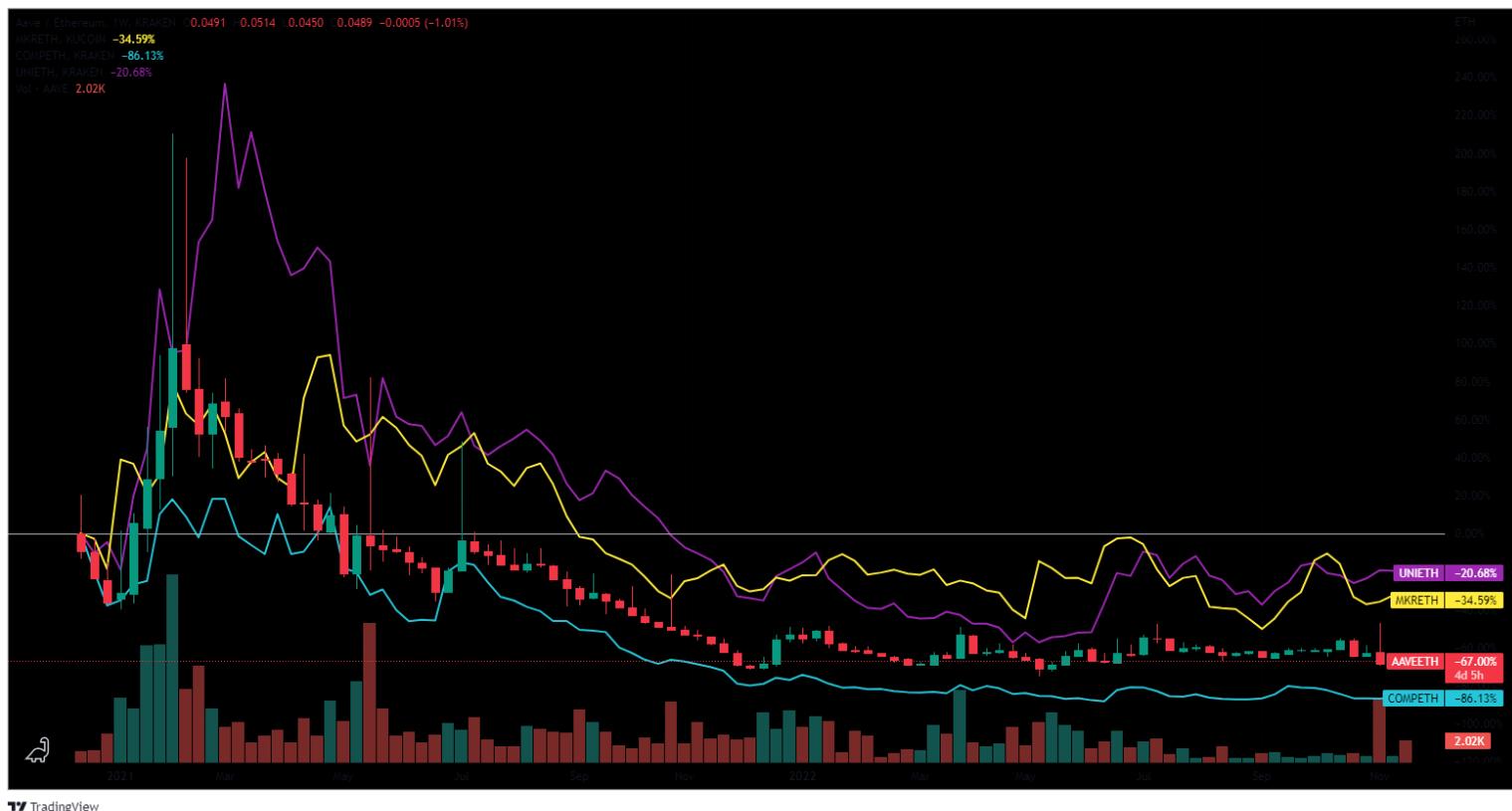
Aave's v3 upgrades are extremely targeted to ensure that the project can continue to be the leading DeFi lending market. With notable competitors coming to the space, it is crucial for Aave to innovate in order to survive.

Emissions

As we covered above, token emissions are currently at 1,100 \$AAVE per day (about \$60,000 at today's prices) to reward \$AAVE stakers that supply capital into the Safety Module. These all come from the Ecosystem Reserve, which has a current balance of ~1.5M \$AAVE tokens, giving an emissions runway of 1,326 days, or 3.6 years barring any change or special expenses. The distribution is subject to a governance vote before being changed. And emissions are important to the protocol right now, as Aave currently doesn't produce enough revenue to pay competitive interest to stakers without token emissions.

Token Performance

\$AAVE is often grouped in the “worthless governance token” meme along with \$UNI, \$COMP, and \$MKR. These tokens are the undisputed foundation of DeFi, but for one reason or another, their price performance has been horrible. Either due to the overhyped nature of DeFi Summer or the bear market has just nuked these coins more than it should have, and token performance compared to \$ETH looks like this:



TradingView

This chart does not look good for these ‘OG’ DeFi assets. And just this month, \$AAVE has dropped nearly 40% from \$97 to \$55. So, for \$AAVE specifically, what could change this trajectory?

Many people will cite claims that distributing revenue to token holders via a buyback and burn model is an efficient and notable way to transfer value from the protocol to the users. In reality, this is a flawed way to view how these protocols can grow their market share *and* token value.

When using up protocol earnings, the protocol is essentially communicating to token holders that they **don't have any other positive NPV projects or use cases for the protocol funds** other than to distribute money back to token holders. It's effectively a dividend. As DeFi and other crypto projects are all essentially startups, displaying no confidence in future investable projects is the exact *opposite* of what we want.

Some team members, specifically [Marc Zeller](#) and Stani, [discussed potential future](#) utility of \$AAVE that *could* be correlated to token demand, and thus, value. But, it was hammered into both of their ideas that the idea of creating protocol mechanisms simply to inflate the token price is useless in the long run, and should not be prioritized at any level. Here is a summary:

- 1) Follow a similar \$CRV incentive model: lock \$AAVE for boosted yield/discounted borrow rates
- 2) Allow protocols to get permissioned asset listing via locking a specified amount of \$AAVE
- 3) Manage the treasury better to produce higher yield

We think point #3 is extremely important, and should be the highest consideration for the team. Because of the emissions structure and Ecosystem Reserve, the treasure is predominantly valued in \$AAVE assets:

The dashboard displays the following key statistics:

- Treasury: \$103M
- Members: 138,780
- Token: AAVE
- Price: \$57.37

Aave Grants Lending

Aave is a decentralized finance (DeFi) protocol that lets people lend and borrow cryptocurrencies and real world assets (RWAs) without having to go through a centralized intermediary. When they lend, they earn interest; when they borrow, they pay interest.

Overview Members NFTs

| Net Worth | |
|------------------|--|
| \$102,697,294.97 | |

| Wallet | |
|--------|-----------------|
| | \$86,304,001.91 |
| AAVE | \$84,253,703.82 |
| BAL | \$1,108,462.47 |
| DAI | \$453,272.06 |
| USDC | \$359,418.48 |
| ETH | \$122,245.25 |

| Apps | |
|---------|-----------------|
| Aave V2 | \$16,292,426.74 |
| USDC | \$6,389,514.78 |
| DAI | \$4,229,721.76 |
| USDT | \$3,874,924.88 |
| WETH | \$738,945.85 |

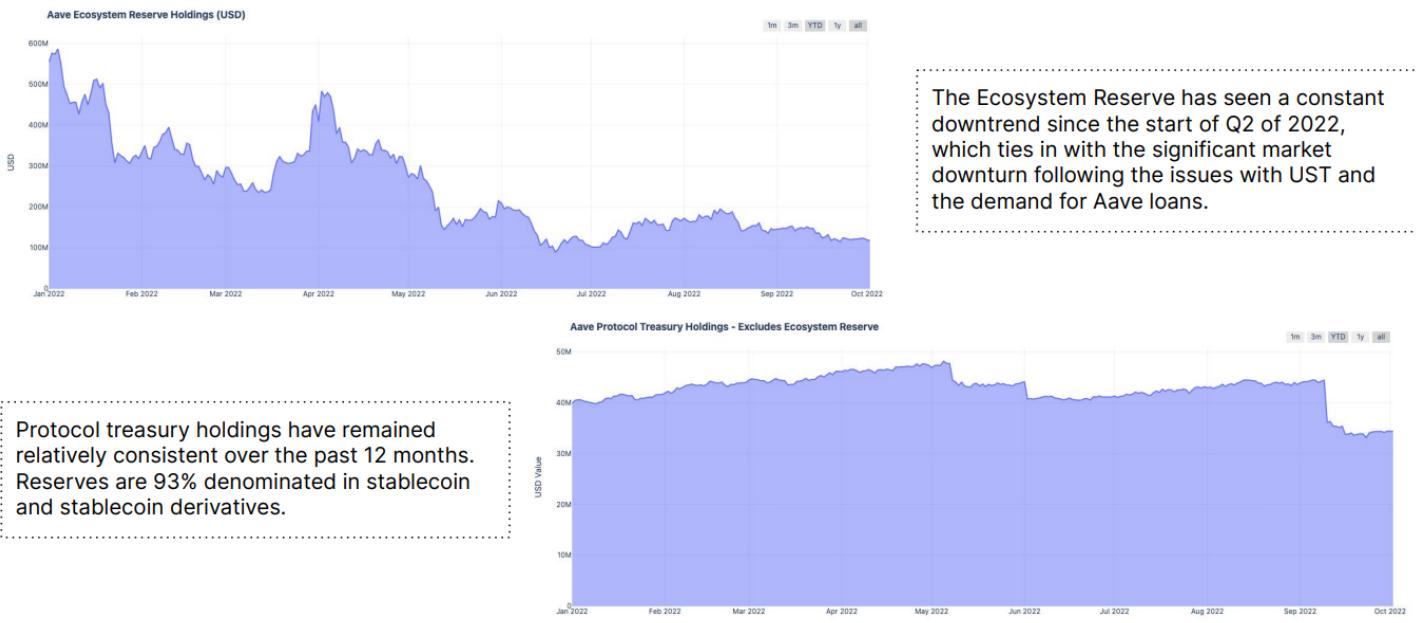
[Zapper Link](#)

Obviously, the \$AAVE makes up the Ecosystem Reserve and needs to be paid out as emissions. But the second snapshot above shows the comparatively low value of stablecoins within the treasury. Throughout the entire year, there was roughly \$40M of stablecoin/other crypto assets in the treasury; we inquired about this with no response. The money likely went to fund v3 and other expenses discussed below, but either way, we would like to see a focus on growing and utilizing the treasury in a productive way, while reducing \$AAVE token exposure,

Given that this has been discussed once before in the governance forum, it should be reasonably expected for it to come up again.

For a little more detail on the impact of \$AAVE being the majority asset on the treasury balance sheet, we can look at some historical data from the [Llama quarterly financial reports](#). The above chart shows the Ecosystem Reserve (ER) value YTD, inclusive of \$AAVE, and the bottom one shows treasury holdings that exclude the ER, 93% denominated in stablecoins.

Treasury Holdings Over Time



[Q3 Financial Report](#)

Usage and Earnings

Aave is a unique protocol compared to some of the others we have looked at because it has a true *historical* perspective since it was launched well before this past bull run. Earnings for the protocol are the percentage of interest paid from the borrower to the lender that goes to the protocol, and this money funnels to the protocol treasury which is DAO-governed.

Here is a chart showing earnings since this time last year:



Aave (AAVE)

Daily earnings in the past 365 days.



Methodology:

Earnings: revenue minus token incentives.

Sources:

Earnings: Token Terminal

[Token Terminal](#)

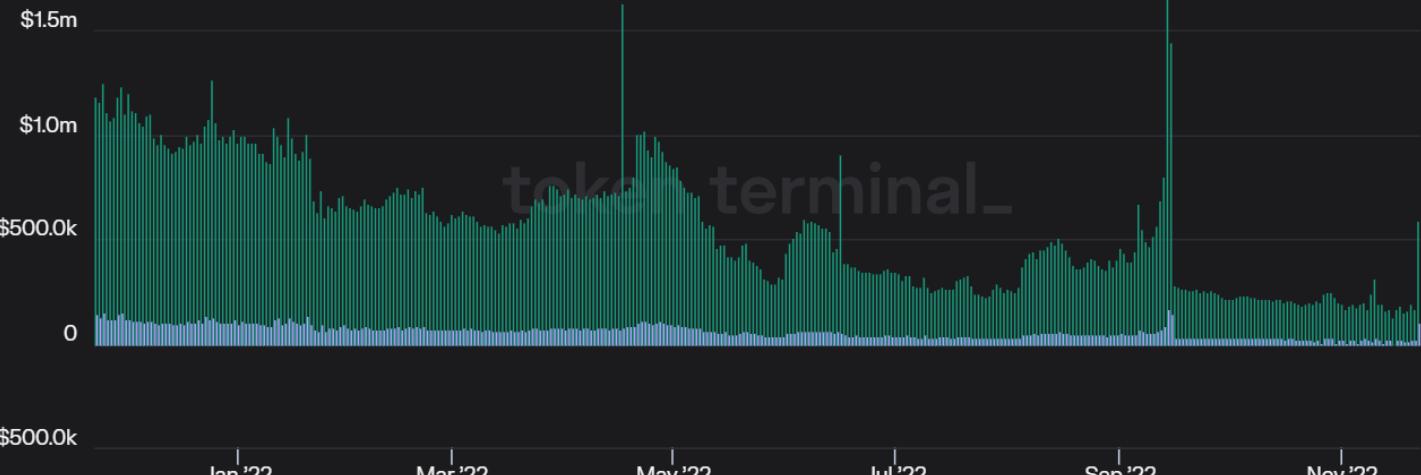
After sustained daily token emissions resulted in daily negative earnings, Aave has reached the tipping point where token emissions are almost entirely offset by the protocol's earnings. While this is a good sign, it also can be due to the fact that \$AAVE price is down so bad that token emission value is simply a lesser percentage of the revenue being earned. Interest rates stay the same in dollar terms, while the dollar terms of Aave getting paid out drops.

In fact, looking a little closer at the revenue charts, this is likely the case. Below shows the past year of daily total revenues and the amount going towards the protocol, typically around 12%:



Aave (AAVE)

Daily fees vs. daily revenue in the past 365 days.



[TokenTerminal](#)

With crypto ever approaching a bottom, and likely staying there for some time, on-chain lending activity has expectedly dried up. Its most relevant competitor, Compound, has shown significantly [worse revenue deterioration](#) over the previous year, solidifying the case that Aave may have better staying power as the premier blue-chip DeFi lending market.

Despite the positive comparative assessment, we still want to see those numbers pump up. We believe a key component to accomplish that lies in **staying relevant in the continued trend towards L2's, specifically as the zk-Rollup competitions heats up**. The v3 portal implementation will hopefully allow Aave to establish its roots in this sector, and outcompete upstarts like Silo Finance and Euler.

Earnings Reports

Well, we have financially come across a protocol that is transparent and accessible in their earnings. [Llama](#) contributes financial reporting on a monthly and quarterly basis posted continuously in the [Aave governance forum](#).

Here are some big takeaways:

- Revenues down 27.9% QoQ
- Revenues *up* 46.3% YoY (through Aug.)
- V3 expenses incurred in September totaled 19.3M

Income Statement (January - September 2022)

| Aave | Q1 Total | Q2 Total | July | August | September | YTD |
|----------------------------|---------------------|---------------------|--------------------|--------------------|----------------------|---------------------|
| Total Revenue | 8,524,904 | 6,354,746 | 1,118,178 | 1,708,937 | 1,752,951 | 19,459,715 |
| Cost of Sales | | | | | | |
| Liquidity Incentives | (18,339,154) | (8,799,273) | (569,025) | (436,381) | (300,738) | (28,444,570) |
| Staking rewards | (12,146,122) | (13,017,415) | (1,720,772) | (2,907,122) | (1,933,015) | (31,724,446) |
| Third party expenses | (4,852,934) | (9,439,192) | (2,465,890) | (367,604) | (17,061,015) | (34,186,636) |
| Total Cost of Sales | (35,338,210) | (31,255,880) | (4,755,686) | (3,711,107) | (19,294,768) | (94,355,652) |
| Gross Profit/(Loss) | (26,813,307) | (24,901,134) | (3,637,508) | (2,002,170) | (17,541,818)) | (74,895,937) |

Llama Reports

If this was a publicly traded company, it'd be really bad news. Aave has lost a lot of money in 2022. While revenues trending down is objectively bad, there's more to the story than just a massive gross loss for Aave.

Liquidity incentives were the primary driver of expenses in Q1. We inquired about this expense to the team to uncover some more detail, but unfortunately didn't get a response. Regardless, that number is trending *significantly lower*, barely even breaking \$1M for the total of Q3. This is good.

Another positive, is that "Third Party Expenses" in September made up **61.5% of cost of sales for Q3, but this is only due to the accounting method for v3 development expenses.**

Llama uses cash accounting in their reporting, so although the \$17M is an expense, it is going to be distributed over the next 18 months. So we can expect that line item to revert back to the previous trend after this report. This is also what we were referring to with the decline in stable-denominated treasury assets above. So most of v3 has already been paid for.

While it may be that the protocol is losing money at breakneck speed in 2022, the historical reports from 2021 tell a complete opposite story:



— Ethereum V1, V2 P&L Statement (Denoted in \$USD)

For the period ending August 2021

| | Jan 2021 | Feb 2021 | Mar 2021 | Apr 2021 | May 2021 | Jun 2021 | Jul 2021 | Aug 2021 | 2021 YTD |
|--------------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|--------------|
| Amounts shown in stable coins | \$000 | \$000 | \$000 | \$000 | \$000 | \$000 | \$000 | \$000 | TOTAL |
| REVENUE | | | | | | | | | |
| Reserve Revenue | 128.32 | 366.45 | 626.36 | 928.00 | 2,840.00 | 1,580.00 | 1,730.00 | 3,270.00 | 11,469.13 |
| aToken Interest | 0.48 | 2.28 | 5.63 | 10.06 | 16.85 | 10.78 | 14.35 | 31.92 | 92.35 |
| Repayment fees | 3.00 | 0.38 | 0.15 | 0.11 | 0.84 | 0.15 | 0.00 | 0.00 | 4.63 |
| Flashloan Fees (v1) | 49.30 | 27.01 | 83.10 | 100.60 | 234.28 | 30.71 | 26.42 | 29.98 | 581.40 |
| Liquidation Fees (v1) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | - | 0.01 |
| Total Revenue | 181.10 | 396.12 | 715.24 | 1,038.77 | 3,091.97 | 1,621.64 | 1,770.77 | 3,331.90 | 12,147.52 |
| OPERATING EXPENSES | | | | | | | | | |
| General expenses | (5.07) | - | - | (36.42) | - | - | - | - | (41.49) |
| Total operating expenses | | | | | | | | | |
| Net income / (loss) | 176.03 | 396.12 | 715.24 | 1,002.35 | 3,091.97 | 1,621.64 | 1,770.77 | 3,331.90 | 12,241.36 |

August 2021 Financials

Yup, cash positive for all of 2021. This just proves that Aave can make money, and a lot of it. This period is representative of the most frothy bull market period in crypto history, so even though the net income figures may not get back to these levels, there is positive cash-flow potential.

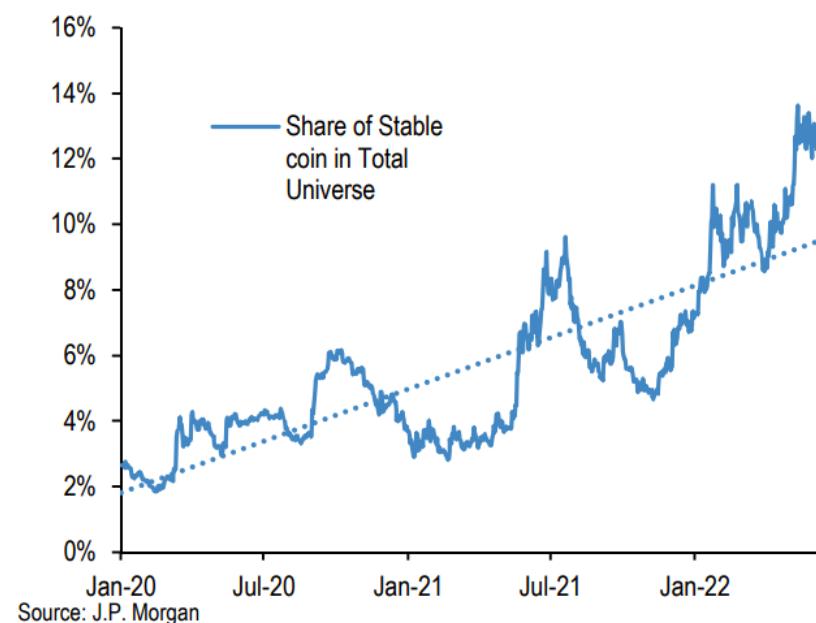
On top of the ability to earn more revenues in its traditional operations, we are hopeful that additional treasury strategies would contribute to revenue growth as well.

GHO Stablecoin

Aave's stablecoin project has been a big topic since the original proposal came out earlier this summer. Aave enters an extremely saturated market, with notable algorithmic stablecoin Frax building out a similar suite of DeFi products, and of course Maker's \$DAI being the biggest competitor. Yet within a market as large as stablecoins, and a growth trend up and to the right (pictured below), this is exactly what a strong protocol like Aave should be doing to stay relevant:

Figure 19: Share of stablecoins in total crypto market cap

In %



Source: J.P. Morgan

[Coin Telegraph](#)

The \$GHO mechanism is simple and very similar to that of Maker's \$DAI. Just as you would normally deposit assets into the protocol to borrow against, you would be able to mint \$GHO. This project aligns *very well* with the v3, and introduces some strong positive feedback loops in terms of revenue and market share growth:

- All interest paid for borrowing \$GHO is distributed to the protocol treasury
- Portals will allow for \$GHO to be seamlessly integrated across different DeFi chains
- \$AAVE stakers will be able to mint \$GHO at a discounted interest rate

If \$GHO is able to grab a significant slice of the ~\$80B stablecoin market share, interest flowing into the treasury will be significant. How Aave is aiming to differentiate its stablecoin is by encouraging a wide variety of assets to be used as collateral by tweaking the borrowing parameters, which are of course up to governance to decide.

All in all, we think \$GHO is 100% the project to watch out for not only in Aave, but across all of DeFi as 2022 comes to a close. This will absolutely have a significant impact on the stablecoin and lending market competitions, and could gobble up market share from other projects, especially as decentralized stables receive more attention.

Speculative Risks

Only because its appearance in CT is timely for this report, we will include a little bit of FUD about a potential systemic risk to Aave. Behind this potential attack is none other than [Avraham](#)

[Eisenberg](#), known [exploiter of Mango Finance](#) for \$100m on Solana. The plan of attack was as follows:

THE PLAN:

1. A whale borrows against a \$CRV position on [Aave](#)
2. Avi borrows \$CRV against \$50m of USDC on Aave
3. Avi dumps his \$CRV, lowering price near liquidation level of whale
4. The whale starts paying back his loan by buying and repaying \$CRV
5. At this moment, Avi longs with leverage on [CEXes](#)
6. CRV pumps past Avi's [Aave](#) liquidation price
7. [Aave](#) has to liquidate Avi's position and buy back \$CRV
8. There is limited \$CRV on-chain liquidity + reduced liquidity from whale repurchase
9. \$CRV pumps like crazy with \$50m repurchased from Avi's USDC collateral
10. Avi makes a killing on perps on leverage from .40 until the loan is completely liquidated
11. Closes CEX leverage long after the loan is completely liquidated
12. Avi also can short [Aave](#), [Aave](#) takes on a ton of bad debt

HOW IT ACTUALLY HAPPENED:

1. CRV announces [stablecoin](#) on the same day, causing \$CRV to pump before the whale has to cover
2. Since whale didn't have to cover, CRV didn't pump as much, there was enough liquidity in the system
3. Avi liquidation pump/short squeeze isn't as violent as it should've been
4. [Aave](#) doesn't make enough on perps to profit from liquidation
5. Might have worked if Avi borrowed in bigger size + more liquidity on perps?

[Jack Niewold](#)

[Here](#) is the wallet that planned on executing the above strategy (the \$CRV position is now empty):

| Aave V2 | | \$7,891,566 |
|-------------|--------------------|--------------|
| Lending | | |
| Health Rate | 1.02 | |
| Supplied | Balance | USD Value |
| USDC | 57,948,923.40 USDC | \$57,948,923 |
| Borrowed | Balance | USD Value |
| CRV | 83,428,928.23 CRV | \$50,057,357 |

[DeBank](#)

When paired with the position that Avi held, along with the levered long position of one of the team members of \$CRV, and there was absolutely potential for a protocol-level problem. Here is the levered long position of \$CRV:

| Aave V2 | | \$54,974,001 |
|------------------|--------------------|--------------|
| Lending | | |
| Health Rate 1.70 | | |
| Supplied | Balance | USD Value |
| CRV | 135,074,782.91 CRV | \$81,315,019 |
| ETH | 5,590.36 ETH | \$6,320,573 |
| stETH | 0.00 stETH | \$0 |
| Borrowed | Balance | USD Value |
| USDC | 32,662,556.41 USDC | \$32,662,556 |

DeBank

If Avi can cause this person to get close to liquidation (\$CRV collateral value down), then theoretically the position owner would market buy a bunch of \$CRV to cover. As this is happening, Avi gets liquidated, Aave has to buy an exponentially increasing \$CRV position to make lenders whole, resulting in losses for the protocol Safety Module.

Although this outcome did not result in the implosion that Avi and many others were expecting, there is the precedent that these types of exploits are possible on Aave and other canonical lending markets. This is exactly what Euler, Silo, and Aave's isolated asset pools aim to prevent. It will be interesting to see how these protocols might do following such an event.

This picture shows how a token that creates bad debt on an isolated market would avoid impacting all other creditors:



Silo Finance

Aave governance has [a proposal to repay the bad debt](#), and given that it is a relatively small amount at \$1.6m, it will be an insignificant amount from the SM. But, this raises the question of how these types of events can be avoided in the future. CT commentators have leaned towards a general stance of appreciation towards Avi for stress testing the DeFi system. Aave should show that an experience learned from this situation, and reduce the protocol's exposure to such events before v3 is fully integrated. This is being [discussed here](#).

Oracles

Another significant risk that *all* lending platforms take on is oracle risk. Aave uses Chainlink oracles, which obviously is preferred by many of the leading DeFi protocols. The situation that could cause problems for Aave is in the event of a market downturn/network congestion, prices could not be submitted properly and liquidations could be falsely implemented or not implemented when they should be.

Although the risk may be significant, it is unavoidable to some degree. What gives Aave a relative advantage is their strong community and governance, which means that when new pricing oracle options are available, we could reasonably expect it to be adopted by the community.

TC Sanctions

One of the most notable events in all of 2022 (which is truly an insane list of events) was the U.S. Treasury's Office of Foreign Assets Control, or OFAC, sanctioning wallet addresses who interact with the Tornado Cash contract. The Aave team, and many other notable DeFi protocols like dYdX and Uniswap, followed suit and restricted access to the main website front-end:



Aave ✅
@AaveAave

...

1/8 The Aave team's top priority is building a safe & secure system for users. We integrated TRM's API on the Aave IPFS frontend, which is why some users may be experiencing trouble accessing the Aave app, one of the frontends to the Aave Protocol.

Read for more info

12:35 PM · Aug 13, 2022 · Twitter Web App

150 Retweets 66 Quote Tweets 673 Likes

[Aave Twitter](#)

The crypto community flipped on its head after these announcements started to come out, and while that seems warranted at first glance, there is more to unpack. There are real world risks in hosting these websites, as there are in *building* a project that manages billions of people's dollars (see [Tornado Cash dev arrest](#)). By restricting access for sanctioned addresses, the Aave team was simply [reducing their risk](#) of painting a target on their own backs.

The Aave contracts themselves are *uncensoring*, and will be forever as they are immutable. So although the Aave hosted front end may have blocked contracts, anyone can spin up a front-end to interact with the contracts, or simply interact directly with the contracts themselves to utilize the protocol. To paraphrase notable crypto voice [Eric Wall](#), he encourages the idea that the risks borne by DeFi should be *as decentralized as the system*, meaning the Aave hosted front-end blocking certain addresses shouldn't lead to them getting publicly rearranged. Read more about the situation [here](#).

Lens Social

Finally, Aave companies, the parent for Aave protocol, has taken to developing Lens protocol. Lens is a decentralized social network focused on NFTs. Users create and NFT when they make their profile, profiles can be managed by groups (which is great for DAOs), and there are a handful of features such as collecting, mirroring, and timestamp NFTs that all are focused on community building.

Read more about Lens [here](#).

Conclusion

Wrapping everything up from the report above, there are some pretty clear positives and negatives to Aave. Some of the things that stand out to us as positives:

- Robust history of community and governance participation
- Dev team recognizes weak areas of protocol and consistently upgrades
- Consistent DeFi giant in terms of TVL

Because \$AAVE's value is entirely derived from its governance value, it is crucially important that the governance could someday *actually be worth something*. And we have seen that to be the case through historical voting subjects and participation. But still, Aave is a startup, and we don't have to demand an incredible dividend return today--just a path to profitability someday.

Where things turn towards a negative for Aave is in its poor earnings performance. Losing nearly \$25m in each of the first three quarters of 2022 is going to be a hard hole to come out of. We are hopeful that the decline in LP incentive payouts, along with the advent of v3 will help improve their margins. Improved market conditions will help as well.

Because of this, and because of the bear market in general, Aave has hit a steep valuation decline. Things could start to look attractive for a protocol that commands such a powerful force in DeFi.