# Risk Terminal Report
## Credmark
## 31 December 2021 - 9 January 2022

**Executive Summary**

VaR - VaR dropped by almost 50% across lending platforms due to high volatility falling out-of-sample and shrinking balance sheet. Compound VaR remains elevated compared to Aave.

LCR - For Aave drop in LCR was significant mainly due to slump in token price. Compound LCR remained stable.

Macro - DeFi market remains unstable driven by decline in "blue chips" prices, same pattern is expected to continue.



Fig 0. 10D VaR in $ bln.



Fig 1. VaR contributions above $0.05 billion
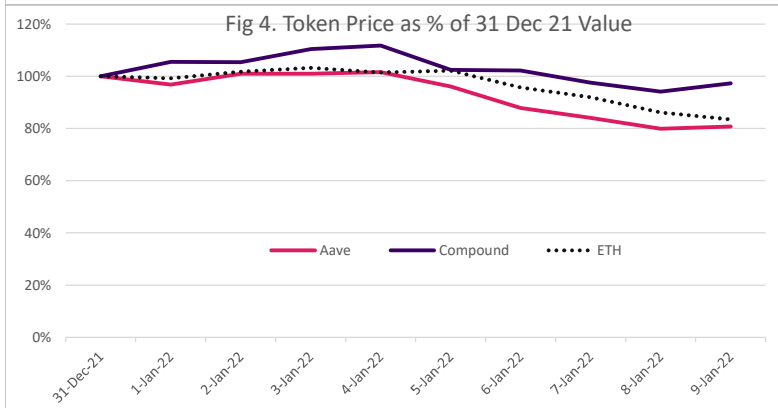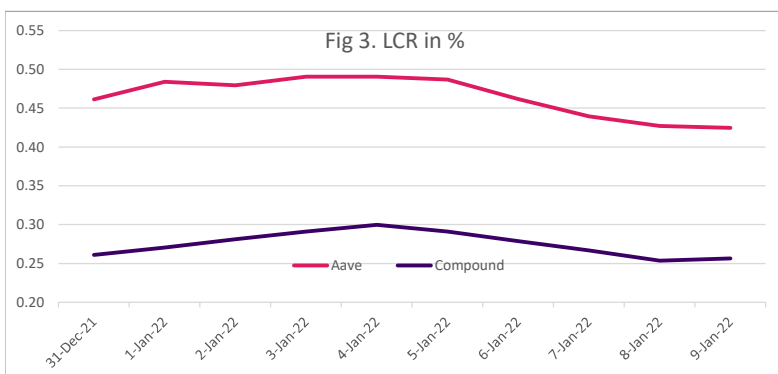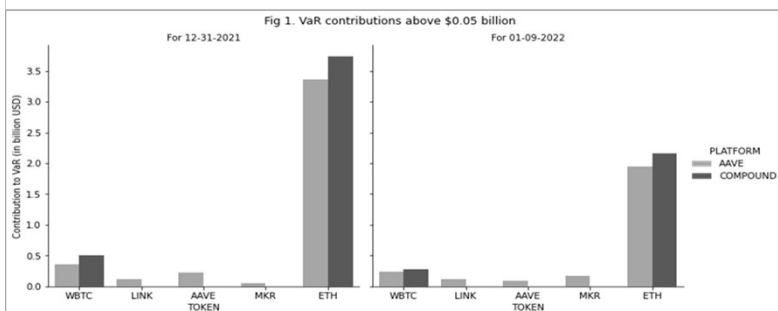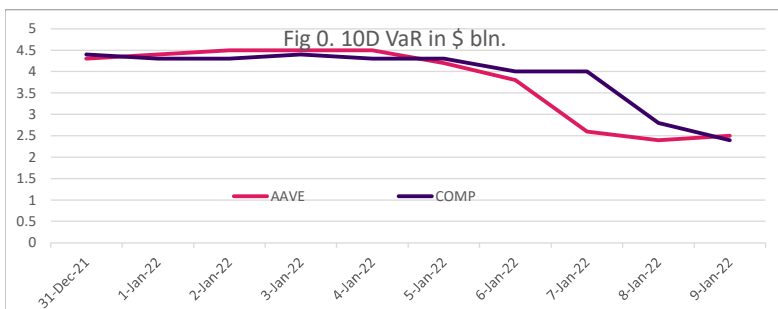
**10D VaR**

| Protocol / $ bln. | 31-Dec-21 | 9-Jan-22 | Change |
|---|---|---|---|
| Aave | 4.4 | 2.3 | -47.7% |
| Compound | 4.3 | 2.4 | -44.2% |

99% Worst Case Samples

| Protocol / Date | 31-Dec-21 | 9-Jan-22 |
|---|---|---|
| Aave | 6-Jan-21 | 12-Jan-21 |
| Compound | 11-Jan-21 | 12-Jan-21 |

***Comments***

· 10D VaR* dropped by 42% for Aave and 45% for Compound between 31 December 2021 and 9 January 2022 (Figure 0).

· 70% of the drop for Aave is explained by the most volatile 10-day holding periods in the first two weeks of January 2021 leaving the sampling window. Since the model is based on the trailing one-year history, volatility preceding this interval is not included.

· The rest, 30%, of the decline is explained by liquidations and withdrawals, primarily in ETH. One of the major drivers is rapid price fall over the same period.

· Compound follows the same dynamics.

· Most of the impact for both protocols is driven by exposure in ETH. Around $3 billion for both Aave and Compound for December 31, 2021 and at least $2 billion for both Aave and Compound on January 9, 2022. Compound remain to have more concentrated positions (Figure 1).



Fig 3. LCR in %



Fig 4. Token Price as % of 31 Dec 21 Value

**LCR**

| Protocol / % | 31-Dec-21 | 9-Jan-22 | Change |
|---|---|---|---|
| Aave | 46.1% | 42.5% | -8.0% |
| Compound | 26.1% | 25.6% | -1.8% |

***Comments***

· Aave - overall LCR** decreased by 8% primarily driven by decline in liquidity buffer of 16%, partially offset by decrease in assets(-6%) and liabilities (-9%). The decline in liquidity buffer may be explained by 19% decrease in AAVE token price.

· Compound - LCR remained stable, only decreased by 1.8%. Liqudity buffer went down by 4%, assets by 7% and liabilities by 1% (Figure 3).

· Decline in Aave's token price was the major driver for decline in liqudity buffer. Compound's token price remained relatively the same. In summary decline was in line with the general DeFi market trend as can be shown by decline in ETH price (Figure 4).

*\* VaR is a statistical measure used to calculate the maximum potential loss caused by market movement under business-as-usual circumstances.*
*\*\* LCR is defined as the proportion of highly liquid assets held by an organization to ensure that they maintain an ongoing ability to meet their short-term obligations (cash outflows for 30 days) in a stress situation.*

For more insights go to:
https://docs.credmark.com/risk-insights/reports