

## **Bear Case of under-collateralized lending, Maple Finance's Analysis:**

### **Maple Finance, Overview:**

Maple Finance is a decentralized corporate credit market built on-chain, to enable institutional borrowers to have access to undercollateralized loans through its lending pools which are managed by accredited pool delegates. Maple itself does not lend or borrow. It builds technology on top of which delegates can source capital from lenders, and fund borrowers. In this sense, Maple's business model is somewhat similar to that of Shopify or Wix, where the rails are provided for third parties to build their own two-sided business.

### **What problem is Maple solving?**

Compound and AAVE have laid a good foundation for decentralized lending and borrowing, but have done little to address the issue of over-collateralization in the credit market. Maple Finance was built to introduce undercollateralized loans to DeFi.

### **Risk Analysis of Maple Finance; Crypto Winter Scenario:**

#### **1. The Business Model Impairment:**

Till now Maple hasn't recorded any default, however, withdrawal requests by lenders have outpaced the rate of loan repayment by borrowers, creating a liquidity crunch. As per the Dune's Dashboard, TVL has already declined ~35% from its mid-April peak and is anticipated to fall more, as delegates will use the cash received from future loan repayments to service withdrawal backlogs. Maple earns its revenues through two kinds of fees paid by borrowers – ongoing fees and establishment fees. These fees are split between the pool delegates, or third parties (who vet the borrowers), and lenders i.e. DeFi users. Now, with the crypto winter, the borrowing slows down, and hence both components of the revenue-generating fees are likely to drop further.

#### **2. Borrower Base Concentration and Cloudy Due Diligence:**

The Borrower Side is highly concentrated: Alameda, Amber Group, and Wintermute combine more than 50% of the loan book. As demonstrated by the 3AC teardown and Celsius fiasco, no one is too big to fail in the crypto ecosystem. Any swing in these three or a dramatic decline in liquidity on the borrower's end may heavily affect the Maple ecosystem.

Moreover, the diligence performed on borrowers aren't very explicit or clear. Though some loan level details are available, there is no visibility on payment clearance and their corresponding timelines. This issue may pose another problem, leniency in the diligence process, in the current scenario:

Since delegates make an upfront fee (33 bps) and only need to put minimal capital at stake (\$100k + as cover), meaning even if all loans default, it is possible the delegate still makes money if they had originated more than ~\$30M. With unclear diligence, delegates can onboard riskier borrowers, when the rate of borrowing declines.

**3. The unsustainability of MPL token in the Bear Market:**

MPL rewards are meticulously designed to have an increased demand from both the Lenders and Borrowers. Now in the recessionary case when borrowing slows down and withdrawals from the lenders accelerate, it plunges the MPL value which artificially raises the lending APYs. Currently, MPL has declined ~88% from its ATH and may suffer continuous devaluation with the persistence of the bear market. Since MPL is underpinned by spending 50% of the protocol's revenues and hence might hamper the Maple ecosystem as well.

**4. General DeFi Lending Pressure:**

In the bear market, the default rates are anticipated to rise which leads the lending platform to lose money. When the lending platform loses money, to control their risk they start recalling their loans. When people are margin called and in the case of illiquidity they start selling some assets in order to meet the margin call or to repay the undertaken loan. In this situation borrowers, stakeholders, and a bunch of users start selling at the same time.

And to make the matter worse, the market makers who are managing the liquidity they're also getting their loans recalled which results in the slippery slope. There are >\$600m in loans outstanding across Maple's Ethereum pools, and just ~\$12m of "cover". If future defaults exceed cover, lenders will likely be impaired.