Innovating on the Global Debt Model

The global debt problem

One of the most severe problems that all synthetics asset projects must face is how they handle the mechanism to manage the total debt. The fluctuation of the global debt will affect all users that use their platform. Two scenarios are possible, users may find out that their debt share is reduced, resulting in a positive user experience, however, it is more likely that the opposite will take place as a result of the market expansion, just as blessing and misfortune depend on each other. In both scenarios, users that are *market-neutral*, have increased debt just by having an exposure, without opening a position (long or short) on any asset, this is one of the biggest problems affecting the user experience on synthetic projects.

It is for this reason that one of the areas that Mobius Finance is focusing on is to reduce and mitigate the fluctuation of the total debt pool. At this time, Mobius Finance has introduced a dynamic handling fee(a type of open interest) in combination with Short Assets to hedge the fluctuation of the global debt. Using this approach can certainly improve the currently available options in the market, but in the end, there will still be some positions that cannot be integrated.

Introducing Debt default vaults (DDV)

Mobius Finance will introduce a mechanism similar to an Insurance protocol to manage the global debt fluctuations.

An insurance product (Vault) will be created, users will be able to enter the vault by depositing their at face-value their crypto assets and becoming underwriters. In the scenario that the global debt increases, the funds deposited will be used to cover a share of the global debt; on the other hand, if the global debt decreases, the difference will be distributed to the vault participants as earnings. This is equivalent to all users becoming a counterparty during a normal transaction process.

Mechanism

If users use the pledged funds of the insurance pool to compensate the newly issued debts, they will face the the risk that the scale of the new debts is unpredictable, and the pledged funds may not be fully compensated. If this happens, it means that the remaining uncompensated debt must be proportional to global debt.

Therefore, the global debt model should not be completely stripped off.

Implementing the DDVs

The premise of setting the DDV is that the total amount of global debt will reach a certain threshold. When this threshold is reached, the net debt will be relatively stable, and the insurance pool's income will be more controllable. This will imply making severe changes to the current smart contracts implementation; therefore, to not affect the main contract, they will be deployed separately, allowing us to have great scalability.

Therefore:

1: The safe pool will behave like a regular product

There will be a subscription period of seven days at the beginning (period 'A'); once this period is done, the pledged funds will be used to compensate for the new debts generated in the next subscription period (period 'B').

If the newly issued debt in the next subscription period is negative (that is, it has decreased), the income generated will be obtained by the users in period A as earnings.

2: The compensation and deduction of the debt will only occur during burning

This is because if the new debt subsidy is settled all the time constantly, the cost is too high and the time granularity is too fine, thus it cannot accurately capture the global debt fluctuation.

For example: after the end of Period A, the total pledged capital is $10,000. At a certain point in time before the cycle is completed, the new debt increased by an additional $10,000. If there is no user burn at this time point, the pledge pool will not change. Because at this time, the global debt has no actual impact on users（ Note: some people may ask that although there is no burn, it will also affect the user's mortgage rate and even cause liquidation. If the short-term fluctuation of the mortgage rate does not cause liquidation, it has no actual impact. If liquidation is caused, it is actually a burn action, and the system will compensate at this time.)

3: What should be done when the pledge pool funds are insufficient to compensate for the new debts?

Take the total capital of the insurance pool as (X), the current total net debt as (Y), the single debt to be compensated is (Z), and the reimbursable amount is (H).

1. When $X > Y$ and $Y > 0$, the compensation coefficient is 1, then

   $H=Z*1$

2. When $X > Y$ and $Y < 0$, the compensation coefficient is - 1, then $H = Z * - 1$ when the net debt is negative, the platform will deduct the absolute value of h when the user burns

3. When x < y and Y > 0, the compensation coefficient is x / y, then

   H=Z*X/Y

4. When x < y and Y < 0, the compensation coefficient is - X / y, then

   H = Z * (- (x / y)) when the net debt is negative, the platform will deduct the absolute value of h when the user burns

4: Conclusion

Based on historical data, the net debt is generally negative. Therefore, the insurance pool will have stable income. However, in our opinion, the amount of pledge pool directly determines the overall risk of the platform. Therefore, after the insurance pool is deployed, the platform token $MOT will be used as an incentive. The amount of $MOT incentive will vary with the income of the pledge pool. The early stage will be controlled by the Governance Committee. After the later data tends to be stable, it will be contracted according to the previous data.