Farming without Impermanent Loss (IL) !

IL Insurance Product

From iZUMi Finance

Background: Uniswap V3 brings higher capital efficiency and more swap fees to Liquidity Providers

Uniswap V3 introduced the concept of concentrated liquidity, which allows LPs to determine the price range in which they provide liquidity and also gives them the option to “rebalance” positions if a token’s price moves outside of their liquidity range. Uniswap V3 increases capital efficiency by up to 4000x for liquidity providers.

Figure 1: APR for ETH-USDC pool on different swaps and networks

Network	Sushiswap		Uniswap V3	
	FEE APR	Reward APR	FEE APR on average	FEE APR in ± 10% price range
Etherum	12.25%	3.87%	36.50%	133%
Polygon	9.01%	2.08%	56.55%	102%
Arbitrum	16.91%	0.58%	37.47%	203%
Optimism	2.21%	8.85%	66.09%	155%

According to the data of Defilama, the APR of Uniswap V3 is much higher than Sushiswap, even if there is reward APR in Sushiswap. Therefore, concentrated liquidity AMM such as Uniswap V3' can provide liquidity providers with more swap fee and higher APR compared with other DEXs, especially when the tokens are placed within a narrow price range.

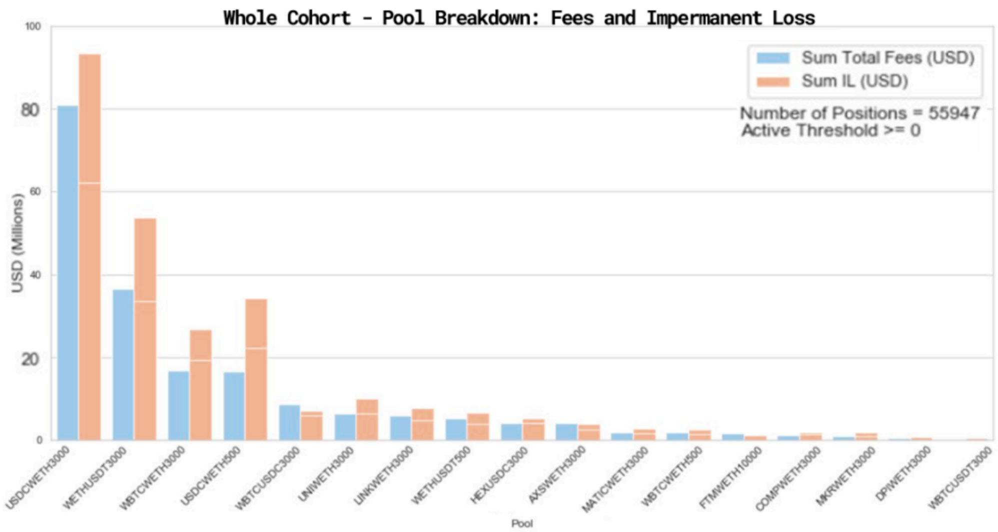
Note:

1. The data of APR on Uniswap V3 is averaged over APRs of Fee Tier 0.05% and 0.3%. If new pools are involved, the other pool will be adopted.
2. The measured date of Uniswap V3 in ± 10% price range is in Aug.6-Aug.20

Dilemma: Uniswap V3 LPs face high impermanent loss due to no hedging strategies

Impermanent loss (IL) has been described as the difference in the value of tokens value in a liquidity pool versus the value of tokens if users had held them individually in thier wallet. If one of tokens skyrockets on traditional markets, the assets on DEXs do not automatically update to match. At this “time lag” stage, there is an opportunity for traders to arbitrage. That gain could be regarded as opportunity cost, which is one of the risks you take as a Liquidity Provider (LP).

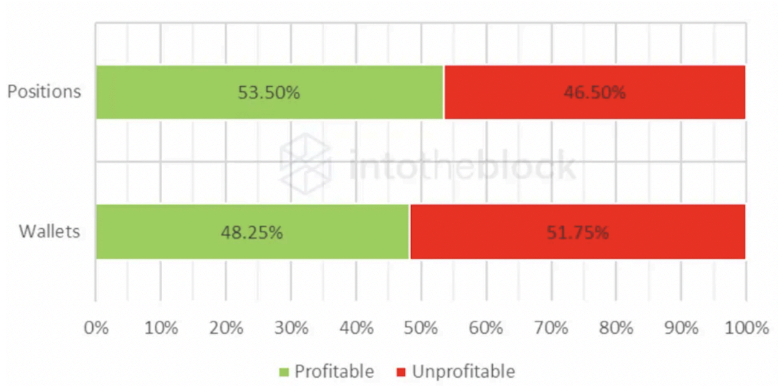
Figure 2: Whole Cohort - Pool Breakdown: Fees and Impermanent Loss



(Source [1]: PANews）

As shown in Figure 2, orange represents Impermanent Loss and blue represents fees collected. It can be seen that the impermanent loss is in most cases greater than the swap fee. Concentrated liquidity like Uniswap V3 indeed can improve capital efficiency. However, the article from PANews illustrated the 80% Impermanent Loss exceeded the swap fee revenue received by LPs.

Figure 3: Profitability of Wallets vs Positions



(Source [2]: Yahoo Finance)

Besides, the study from the Bancor team analyzes the risk-adjusted returns of each position accounting for the time that they were active 53.50% of the positions were profitable versus 46.50% that were not. When looking at wallets those that were in profit were a minority with 48.25% over 51.75% that were unprofitable. Therefore, Uniswap V3 LPs face high impermanent loss in most cases.

Solution: Impermanent Loss Insurance from iZUMi Finance

Description: Insurance protects LPs from any financial loss of principal as it effectively helps to manage the risk. Users buy insurance for their liquidity positions on high capital efficiency DEXs, such as UniswapV3 or iZiSwap, to prevent unexpected impermanent loss while enjoying non-custodial safety and high APR of capital efficiency.

KEY TERMS	
Underlying	Hybrid hedging strategies
Subscription	USDC/ETH
Tenor	30 days
Network	Arbitrum
Insurance Fee	90% of collected swap fee
Expected Return	8%-25% APR (after insurance fee deduction)
Payment at Maturity	Cover all the impermanent loss
Insurance termination	• Insurance period ends • Price out of range

This product is suitable for LPs seeking protection for their positions under all market conditions. The insurance seeks the best price on centralized exchanges and decentralized exchanges to hedge the position through spot or derivatives, and maintain the balance with the lowest cost. It ensures that the LPs can obtain the maximum profit without losing the principal.

How it works

Step One: Users transfer the ETH and USDC into the wallet which is supported by Cobo Daas and it will put into the trading pair ETH - USDC pool in Arbitrum@Uniswap V3 roughly at a ratio of 1:1.

Step Two: In order to generate more fees, liquidity will be placed within ± 10% of current price (Symbol P_0).

Step Three: The insurance period comes to end, e.g. 30-day insurance effect on August 1st will end on August 31st. iZUMi Finance wil charge 90% of the swap fees as the insurance fee when LPs withdraw the liquidity. If the price has exceeded the ± 10% of P_0 during the period, the insurance will end and the insurance repayment will be executed. (The insurance repayment will be calculated based on impermanent loss level and it will be paid immediately when the LPs claim the loss)

Estimating Yield with Impermanent Loss and Insurance

Suppose that on August 1st, the price of ETH is 1000 USD, and the price range of the liquidity provider is set at ±10% of the current price, that is (900,1100). Dennis had put 100,000 USDT and 100 ETH into the pool.

- Scenario one: During 30 days, the price of ETH is not out of range and APR is 200% in the end. After deducting 90% of the insurance cost, Dennis would still collect the yield 1.64%=20%/365*30.

- Scenario two: On the Aug. 5th day, the price is out of range. At this time, suppose the price (Symbol: P_n) of ETH is 800 USD, and APR is 200%. In this case, the revenue is $4,931.50=200%/365*5*(100000+100*800). The impermanent loss is 7.5%. Therefore, Dennis's principal loss is $13,500=7.50%*(100000+100*800). If you don't buy insurance, the loss will be -$8568=$4,931.50-$13,500; Under insurance protection, the income is $493.15=10%*$4,931.50

Here is sum of the situation when the P_n =1000, 900, 800, 700

	Impermanent Loss	5-day Yield		Insurance Coverage($)
		Without Insurance	With Insurance	
P_n=1000	0.00%	2.74%	0.27%（APR19.7%）	0
P_n=900	2.70%	0.04%	0.27%（APR19.7%）	5132
P_n=800	7.50%	-4.76%	0.27%（APR19.7%）	13,500
P_n=700	12.70%	-9.96%	0.27%（APR19.7%）	22,860

From the figure above, the more price deviates from the initial price, the greater the impermanence loss to LPs. However, all the loss can be covered with the insurance of iZUMi Finance, it can bring users more stable returns and cash flow under the circumstance that the principal can be guaranteed.

Security Guarantee

Users' LP will be in a non-custodial way and the Vault supported by Cobo DaaS and anyone except the user has no access to withdraw or transfer the LP to other addresses without users permission. iZUMi Finance will also deposit a sufficient margin to ensure the solvency. All the funds will be executed by smart contract, guaranteed the capital flows. Total process on-chain brings more transparency to the users. All of the processes can be tracked and recorded on chain.

Contact us

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Declaration

Referance

https://www.panewslab.com/zh/articledetails/D74402066.html
https://finance.yahoo.com/news/concentrated-liquidity-increases-risk-impermanent-224407547.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAALYJJ7Lcwkvcjf7ANbBH-fnfB8LDZwZJQ8c5aZAUPhrBQn6_ijRyLP1dXvi1WYAhaIIG9r9TVGWb6bO6Qx9kRs0IVHlWBnka885reRzABQF8n6KrEghWGS9jvZWpzwjQTa8E3TQ3vMrwtghCK48u1uXnDTI6k8nFRHQ-hR2Y14m1