Crypto Token Risks

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Disclaimer

Defi, yield farming and liquidity mining are the most risky ways to "invest" because one can lose 100% overnight for all types of reasons. Please read other articles such as Defi, Yield Farming and Liquidity Mining. This article discusses price risks, not the risks related to token management.

Background

The Defi age has been hijacked by the dog season.

The rise of Dogecoin has inspired an army of "community tokens." Many people have realized that they can quickly get rich by creating a token with virtually no cost, and promoting the token online. Since both Dogecoin and Shiba Inu have reached $30+ billion market cap, there are buyers for all types of tokens. The media has been advertising how one investor has made billions by buying $8,000 of Shiba Inu tokens, which will surely attract more attentions from the general public. Many useless tokens created in the last month have exceeded market cap of $100 million.

In Defi, it is not difficult to create a $100M token. For example, we may issue 100M tokens, control 99.999M ourselves, and provide liquidity with 1K token and $1K USD, which will create a $100M market cap token. If we are willing to spend $10K to buy from the tiny liquidity pool, we may drive the token price to $100, which makes the market cap of the entire token $1 billion. The size of the liquidity pool is one important metric to evaluate the token market cap.

Defi is such a risky world, and people who rushed into SQUID clearly recognized that after losing all their money. However, similar tokens and projects are abundant in the Defi world, which may see a rapid decline in token prices. In Defi, the line between new projects and a Ponzi/pyramid scheme is sometimes blurry, so I will call them "experimental" instead.

We can tentatively classify them into five types:

1. Soft rug pull
2. Hard rug pull
3. Community tokens
4. Experimental projects
5. Disguised experimental projects

Soft rug pull

Farming is one of the reasons, probably the primary reason, that Defi has flourished. Many people may feel offended and disagree, but there is no denial that https://polywhale.finance/ brought billions of funds onto Polygon, and https://geist.finance/ made FTM visible. In a typical farm, the organizer will do the following:

1. Creates an inflationary token with unlimited supply. Let us call it ZZZ
2. Emits one token or up to 50 tokens per tick, or every 3 seconds (using BSC as an example)
3. Creates a set of farms for liquidity provider token issued by Pancakeswap, and assign a % of emission to each farm
4. This results in a very high annual interest rate for the liquidity mining pair ZZZ-BNB, typically starting with more than 1000% daily return, quickly dropping to 50% daily return or lower when new speculators begin to deposit

In a soft rug pull, the owner will take away majority of the token value by doing one or more of the following:

1. Run with presale money before starting the project
2. Build a honeypot token, which we can only buy but not sell
3. Withdraw initial liquidity. The owner may have provided the initial liquidity of 100ZZZ and 100BNB. After many purchases, the liquidity pool may have 10ZZZ and 500BNB. In that case, the owner will take away the 500BNB and trash the ZZZ tokens
4. Sell his ZZZ tokens. The owner typically receives 10% of token emissions. He may simply sell the tokens into the liquidity pool. If the liquidity pool only include 10% of total tokens, selling another 10% into the pool is likely to reduce token price by 90%+
5. Walk away, also known as "pull a Viking" because https://www.vikingswap.finance/ is probably the first one. It is amusing that a community may have taken over the project, so the project is still alive today. In most cases, the project will die instantly

To gain confidence from the community, many projects may decide to conduct a fair launch with only a tiny amount of presale, and burn or lock the liquidity. However, the owner can always sell his tokens; there is no effective way to protect against the soft rug pull.

Hard rug pull

In a hard rug pull, the owner takes away not only the native token, but also all deposits made into his farm/project. The owner does not have to do that himself; he may ask a

friend to do it anonymously and fake as a victim. Our early BSC users are still wondering what happened to the Uranium Finance.

This type of hard rug pull may happen in many ways:

1. Use or build a malicious contract. The initial version of Pancakeswap contract has a migrator function that allows the owner to transfer all assets to anywhere else, which is used for many scam projects. Some contracts are even worse – once we give an unlimited token approval, the contracts will actually drain tokens from the wallet.
2. Use a normal contract, or hide contract until the last minute, and switch to a malicious contract.
3. Use a custom contract with complicated codes, and later find a flaw

https://rugdoc.io/ is an essential free tool against hard rug pull. The team compares the contract of a particular farm to the original version of the contract, and identify any difference. Some projects, especially vault projects or lending protocols, have very complicated codes that cannot be easily reviewed. https://app.cream.finance has been hacked a few times and people no longer feel surprised. On BSC, that honor goes to https://valuedefi.io. In general, I try to avoid using vaults and lending protocols – even AAVE may not be totally safe.

Community Tokens

Dogecoin, Shiba Inu, Dogelon Mars, Yooshi, and many others are memecoins or community tokens. Technically, BTC is a community token too. When such tokens are created, they do not typically have functionalities, other than being valued by a small group of people. Those people will then promote the token on one thing only – it will go up in price, maybe many times like what happened to Dogecoin or Shiba Inu. The creation of NFT is timely, given many community tokens an excuse that the token has some value.

As someone believes in market efficiency – the current market price reflects all known information, I am not interested in those tokens that have no fundamental value. The rise and fall of the price of those tokens rely only on two factors: (a) how many people will buy or sell, and (b) how large the liquidity pool is. When many people try to get into a small liquidity pool, extreme price actions may happen in either direction.

Experimental projects

Before the dog season, Defi owners are much more polite and subtle. They do not promote their tokens by claiming that the price will multiple. Instead, they call the tokens experimental tokens or projects. The nature of those projects remains the same: the

value of the token purely depends on the dollar amount of participants and the size of the liquidity pool.

Experimental projects have evolved several generations:

1. I am not sure whether AMPL is earlier, or Basis Cash is earlier. Anyway, AMPL is the first of the reflection tokens – the total supply increases if the price is higher than $1, and decreases if the price is lower than $1, and % for each participant is stable. For example, if AMPL has 100M supply today and $1.1 token price, the next rebase will increase the supply by, say 5%. If we have 1M tokens before the rebase, we would have 1.05M tokens after the rebase. If the price does not change, we would suddenly gain 0.05M. Clearly, if more people buy AMPL, everyone's holding becomes more valuable. Alternatively, it may rebase to near zero. AMPL is a perfect example that similar projects may last for a very long time, although I do not know why.
2. Basis Cash is the pioneer of algostablecoins that pegs to $1. It includes three types of tokens: share, cash and bond, and gives hefty daily interests, sometimes up to 20% daily, before collapsing. Many similar projects increased to huge market cap, such as BDO on BSC. If BDO hasn't been pegged to other stablecoins, it may still be running today.
3. After an entire generation of algostablecoins collapsed, Olympus DAO created a new type of projects. By controlling all liquidity of its token, it claims that the price will be stable, even when it issues 1% to 2% daily interest. That is a false claim – although controlling liquidity would help to ease a collapse, the project will collapse if a portion of users decide to cash out. Nevertheless, OHM has reached billions in market cap, followed by TIME. Klima creatively linked itself to climate change, and there are many other OHM forks created on a daily basis.
4. There are more aggressive forms in crypto: BNBStake died quickly, but SmartCoin survived phase 1. SmartCoin has tied the daily interest rate to the total value locked. With every doubling of TVL, the interest rate will double too. For days, SmartCoin attracted up to $50 million of TVL, with daily interest rate exceeding 70%. Although the token value declined from $2.5 to $0.1, many early investors probably have made a profit, with the late investors holding the tokens waiting for phase 2.

Disguised Experimental Projects

Unfortunately, a large portion of all Defi projects are disguised experimental projects. They give free tokens to users for participating in their projects, which the users will sell back to the liquidity providers. Some projects like PancakeBunny on BSC or Adamant on Polygon clearly state that they will hand out some tokens for every dollar received.

This is no difference from “Give me $1 and I will give you $2,” with some types of project as façade. Very few projects were able to control the token inflation.

Conclusion

Reasonable or not, Cryptos now have a combined market cap above $2.8 trillion, exceeding U.S. dollar in circulation. With traditional finance finding ways into cryptos through BTC ETF and future ETF on other main tokens, crypto price may become even more inflated. Crypto market has significant risks but also offers outsized returns, motivating us to continue researching for opportunities.