DigiFT RESEARCH

Can DeFi achieve sustainable growth?

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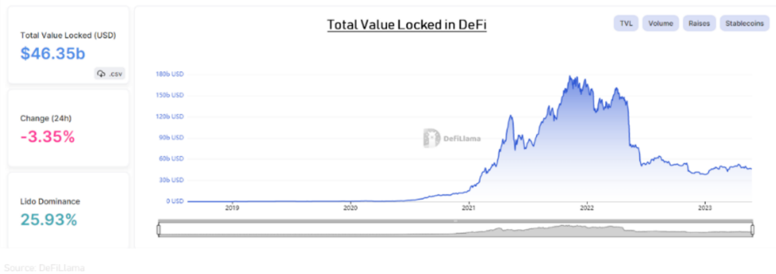
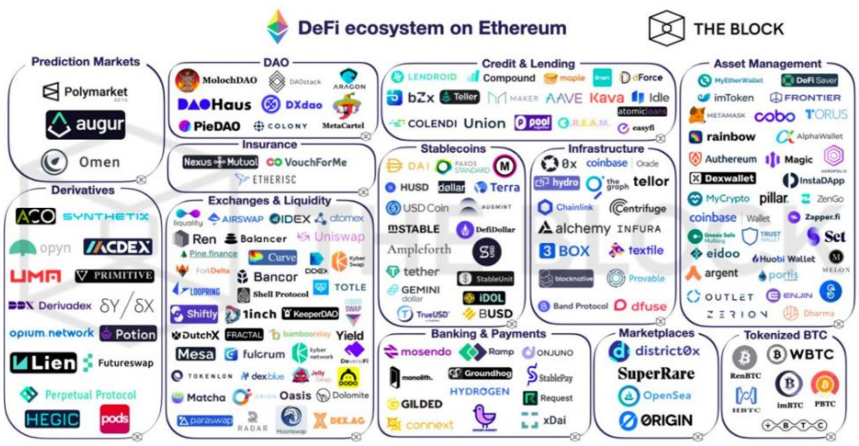
DeFi: An unstoppable trend



Source: defillama.com

Since 2018, when DeFi protocols first launched, DeFi has become an industry to be reckoned with, with hundreds of billions of turnover and total value locked. As an open, timely, accurate and traceable ledger, blockchain technology has enabled this new financial paradigm. Just on Ethereum alone, millions of builders are working on thousands of DeFi applications. Ideas and innovations are emerging all the time, and as the diagram below shows, the DeFi ecosystem is incredibly vibrant. Regardless of whether we support it or not, decentralized finance has emerged as a powerful and transformative trend that cannot be underestimated.



Source: The Block

With all the disruptions of centralized financial institutions, including Silicon Valley Bank as well as FTX, one of the biggest crypto CEX, investors are increasingly concerned for the safety of their assets. According to a survey from The State of DeFi (2023 version), asking investors what they value most when holding their assets, their top 3 concerns are:

1. Control: direct ownership of their assets

2. Security: no third parties and self-reliance

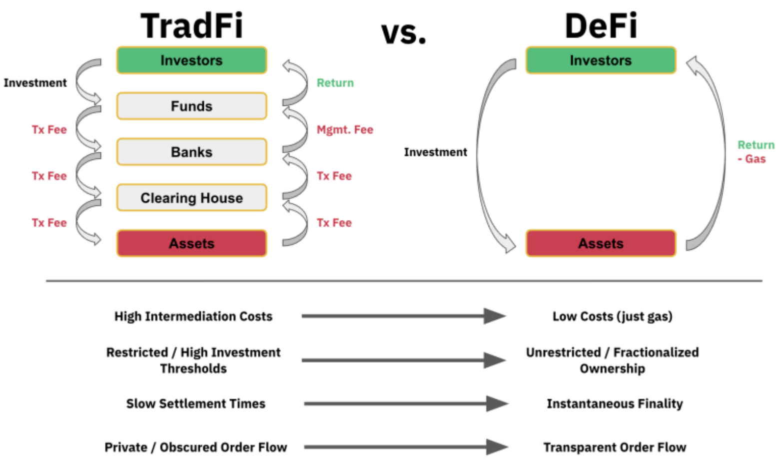
3. Trust: transparency

What is the appeal of DeFi?

Besides the self-ownership powered by blockchain and crypto technology, as a decentralized ledger, public blockchains such as Ethereum enables assets to be highly programmable, and transactions can be settled with high efficiency and low cost, with transaction data recorded immutably, publicly, and in real time.

Tokenization enables DeFi applications to achieve various benefits compared to traditional financial services, including:

1. **Fewer intermediaries, lower cost:** regarding cost, as transactions are executed through on-chain smart contracts, assets settle and clear directly based on the smart contract's logic, without cumbersome T+N settlement processes caused by complex traditional accounting methods and unsynchronized ledgers, thus removing most intermediaries in the process.



Source: Binance Research

2. **Flexibility and interoperability:** Once assets are tokenized, they can have high flexibility and interoperability, and can be seamlessly integrated with other on-chain financial applications, offering a better experience and lower cost for end-users. For example, an investor can acquire assets on a DEX, then use said assets for collateral in lending activities immediately after the execution of the transaction (which might take only several seconds), without the need to open separate accounts and transfer assets between different platforms.

3. **Real time analytics:** blockchain enables a timely, transparent, accurate, and complete on-chain data stream for real time monitoring and analysis.

In search of sustainable yield

During the crypto winter, the average DeFi yield for stablecoins was even lower than US Treasury bill rate, otherwise known as the “risk free rate”. Below is a screenshot of AAVE, the largest lending protocol on Ethereum, offering only ~3% APY for liquidity providers.

Assets	Wallet balance	APY	Can be collateral		
WETH	0	1.46 %	✓	Supply	Details
WBTC	0	0.08 %	✓	Supply	Details
USDT	0	2.43 %	—	Supply	Details
USDP	0	1.38 %	—	Supply	Details
USDC	0	3.07 %	✓	Supply	Details

Source: aave.com (as of June 19, 2023)

DeFi yields are highly dependent on on-chain activities. Currently, DeFi yields can be obtained via three kinds of activities.

1. **Staking**. Staking depends on new token issuance, and it can be risky for staking token with small market cap.

2. **Trading**. Liquidity providers for trading pools can obtain yields through sharing in the trading fees of the pools. However, this depends on market conditions and on-chain trading activities.

3. **Lending**. As DeFi is a mostly an anonymous environment lacking credit creation, lending activities require over-collateralisation and generate only low interest rates during bear markets.

We believe that natively digital on-chain assets with no real-world ‘presence’ or use-case have limited fundamental basis for valuation and consequently exist in a bubble. In a crypto winter situation, with on-chain activities sharply declining, DeFi yields will correspondingly drop to an extremely low level. Real world assets can give DeFi a sustainable yield source which cannot otherwise be obtained – as an example, in the private credit markets, it’s not hard to find a risk-adjusted return of 10%.

Given that the fundamental role of finance is to empower the real economy, if we can bridge assets from the real world to the blockchain, we can give DeFi applications a sustainable yield source while increasing capital efficiency and lowering costs to support productive economic activities.

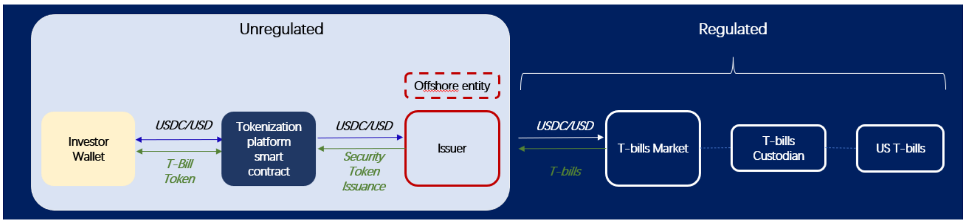
Bringing real-world assets on-chain

For real world assets, no matter a stock, a bond or something else, a legal entity needs to own or custodise the asset. During a normal tokenization process, an issuer will be responsible for tokenizing the real world asset (RWA) and mapping such RWA to the blockchain. Several DeFi projects aim to bridge the two worlds, bringing their processes and frameworks to make on-chain RWA happen. But most of them remain quite problematic.

Challenges with existing tokenization structure

We believe that decentralisation doesn’t necessarily equate to deregulation. With the demise of FTX, regulatory requirements are likely to increase in the whole crypto space, with regulators likely to impose new regulatory frameworks for dealing with cryptocurrencies.

The graph below is a US T-bill tokenization process used by one of DeFi protocols. The right part describes the normal T-bill market, which is fully regulated. The left side describes the tokenisation process, which is unregulated. Briefly, the issuer gets USD or USD stablecoins from investors and uses them to operate in the T-bill market.



Source: DigiFT

Many issuers in the space are not regulated, which means:

1. Issuance structure, process flow or risk management might be unsound

2. Investors might not receive comprehensive information disclosure

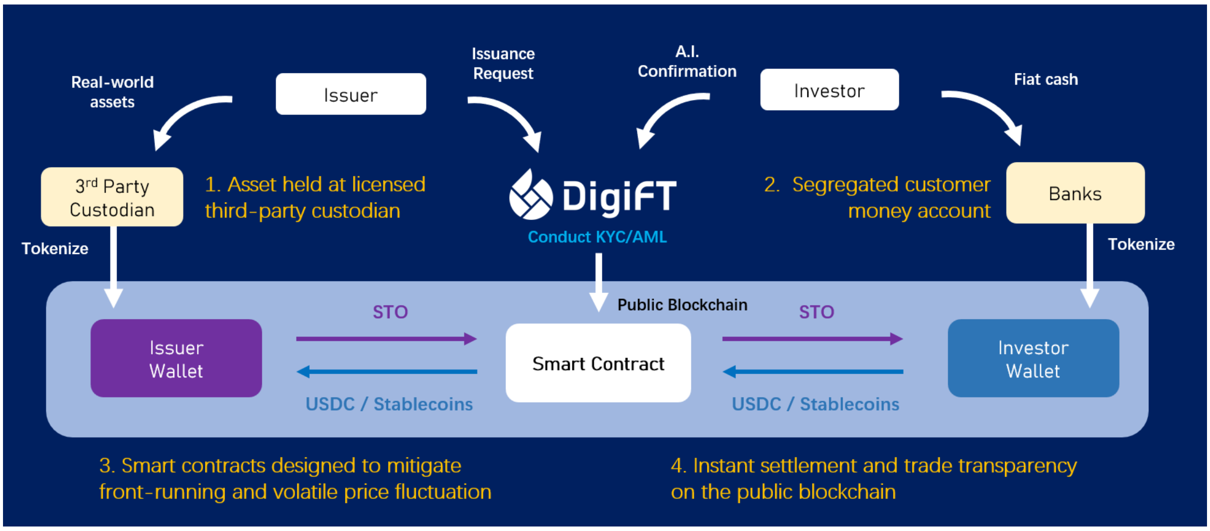
3. The executive team might lack professional finance know-hows

4. Underlying assets might not be properly segregated

With such framework, investors can only rely on the issuer's reputation, which is a huge counterparty risk.

Best practices from a regulatory-compliant DEX

DigiFT has been in the DeFi space since 2020, building a regulatory compliant DEX for security tokens. The leadership team comes with extensive experience in financial services and blockchain technology, which is instrumental in addressing the legal and technical hurdles to bring RWA on-chain and be compatible with existing DeFi applications.



Source: DigiFT

DigiFT itself is a regulatory-compliant DEX and has no custody of neither users' nor issuers' assets. The off-chain assets are in third party custody and the on-chain assets are in users' own wallets with their own control. All the issuers and investors will be required to pass AML and KYC, combined with other needed information.

The smart contracts are designed to support a fair, transparent, and orderly market, with mechanism to prevent disorderly trading and front running.

For the transaction and investor perspective, one of the major concerns is how to regulate investors and transactions, as the blockchain ledger is permissionless and anonymous in nature. The good news is that the ledger records all the transactions in a complete, accurate, and timely manner. The ledger is immutable and transparent, thus we can monitor on-chain activities in real time.

Combined with KYC (Know your customer), KYW (know your wallet) and wallet addresses labelling (coupled with third-party data analytics), we can achieve comprehensive risk assessment on the investor for AML and CFT purposes.

At the Point Zero Forum, DigiFT held a workshop to discuss in-depth the status, issues, and opportunities of real-world asset tokenization together with speakers form Citi Global Insights, Allen & Gledhill LLP and SIX Digital Exchange.

Challenges and future state

With the prosperous development of DeFi, an increasing number of professionals from traditional finance and web3 sectors are paying attention to this space to build bridges between the two worlds. Traditional finance and decentralized finance have never been mutually exclusive. However, in our practice we still face numerous challenges. For example, lack of standardized smart contracts, lack of clear regulatory framework for tokenization and trading, and limited institutional participation.

From paper notes traded at counters to electronic forms, financial instruments have continuously evolved as new technologies emerge. Now is time for RWA tokenization and DeFi to take centre-stage, in a regulated manner.

About DigiFT

DigiFT aims to provide regulated decentralized finance solutions on the Ethereum public blockchain. We are operating the first regulation-abiding decentralized digital asset exchange where asset owners can issue blockchain-based security tokens efficiently and cost-effectively. Investors can trade with continuous liquidity via an AMM mechanism and retain control over digital asset tokens in their own wallets. We are a global outfit backed by well-established venture partners. The founding team originates from international financial institutions and has deep blockchain technology knowledge.

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