Overleaf link: https://www.overleaf.com/9192864935sjjdxcbxyhpb

Tokenizing overall markets and specific risks

Currently, there's no way to invest in overall markets with the exception of ETFs. However, ETFs are only useful for securities being currently traded. This creates two main issues:

1. There are dozens of unique asset classes that cannot be directly traded by individual investors, such as real estate, and
2. Things we wouldn't even define as asset classes such as the GDP of nations or political risk in a nation.
3. This paper will explain and provide insight for how tbd has successfully created a protocol to tokenize these assets and risks.

For cryptocurrency investors

traders, funds, Defi users, and institutions, tbd is an ERC-20 compatible smart contract that tokenizes real estate value rising with the value as the overall market rises well with our corlotization system it's also possible to short this token if you believe the value of the current asset is overvalued by simply borrowing against tbds value in stable. With our protocol, other tokens can also be added with the same mechanisms in place for longing or shorting an asset or market. From ones updated monthly as our current real estate offerings to real-time models such as forex or risk and gdp really the potential is limitless.

The global opportunity

Combining blockchain technology with the process of data aggregation, any economic data can be brought to market via crosscollateralized, asset nominal tokenization. You can even invest into or short the entire global economy again the only real limit is imagination

How it works

By getting data from Zillow's API with more sources to be added in the future as we're able to create our own forms of data extraction we're able to find the value of the average single-family home in America and insert that into the chain using chainlinks oracle service the average number found will then be divided with a divisor to set the token into single-digit numbers for example real estate will be divided by 100,000. Well, something larger say a specific industry could be divided by a larger number to determine the value of the token.

Collateralization

Tbd provides synthetic assets that track, constantly changing external metrics. To do so without any underlying collateral would have created a model where it becomes impossible to guarantee the value of the asset remaining pegged to whatever number it's spoused to track. We claim that there must be backing collateral for each asset to properly maintain its price. Therefore, for any asset to be minted, there must be at least 100% collateral value staked in a secure smart contract on the Ethereum network this is nearly identical to how dai is minted. These collateralized smart contracts are referred to as Vaults. While 100% collateralization could be the minimum backing, it is inherently too risky as even the slightest price movement

would cause the system to have insufficient collateral. As such, the minimum ratio is between 150% and 200% backing collateral. This system can accept anything that has value and conforms to an ERC20 standard interface. Initially, Vaults will only accept a select few types of backing collateral. When determining the collateralization ratio for a given Vault, the underlying assets are translated to their USD value via on-chain Defi price oracles. Any vaults that fall below their collateralization ratio will be subject to a liquidation event.

Fees

Whenever a vault is created there is a market-determined fee established by the dao paid in eth or dai to the tbds treasury The fee payments are used by the tbds Development Team to further develop the tbds protocol and other relevant products or tooling, Oracle compensation etc

Governance

The TCAP Protocol is managed as a Decentralized Autonomous Organization (DAO) governed by a ERC20 standard interface token, CTX. CTX holders are able to vote on board seats that serve an one year term this is done to keep governance democratic well still functioning like an corporation so rapid desections can be made.

Distribution

TX has an initial supply of 21 million tokens, which are distributed to the TBD Team, Protocol Treasury, and Community members. Any CTX allocated to the Cryptex Team, Advisors, and Treasury are distributed via multi-year vesting contract. CTX tokens are rewarded with a value of ZERO. the overall supply of tokens will grow by 2% each year to compensate stakers of the token. The distribution goes as following 15% to the founding team,60% for the treasury which can be sold for capital raising, 25% for initial protocol incentives

Early Adopter Rewards

As an incentive for early Adopters, the tbd protocol will reward tbd tokens to Vault owners in the first 14 days of deployment. Any Vault owner with outstanding tbd debt will earn tbd tokens on a per-block basis. Early adopters rewards are issued over 14 days for a total of 500,000 CTX. Assuming approximately 6500 Ethereum blocks per day over 14 days (91,000 Ethereum blocks), the per-block reward would be 5.4945 CTX split across the debtors at that point in time.

Liquidity Provider Rewards

As an incentive to provide liquidity for TCAP on certain Decentralized Exchanges, the CTX protocol will reward CTX tokens to any liquidity provider who stakes their liquidity pool position within the CTX protocol. These tokens will be rewarded on a per-block basis and be distributed to liquidity providers based on their percentage of pool ownership. Initial liquidity provider rewards target a 6 month cycle where the per block rate is higher initially and decreases on a monthly basis. The total amount of CTX for the initial 6 month liquidity provider rewards is 20% of the protocol or 2,000,000 CTX. Assuming approximately 6500 Ethereum blocks per day over 6 months (1,170,000 blocks), this would result in 1.7094 CTX issued per block

References

[1]