

Problem

Today, investments are made based on a risk rating. This risk rating is controlled and published by agencies such as Moodys. In 2008 it was clear that the risk rating models were not effective.

Various attempts such as stress testing, capital requirements, and risk taking standards have been implemented to reduce the risk of a crash. This has now had the impact that many areas of the market suffer from lack of investment. This has then further resulted in dominance of the markets by a few number of rich institutions or people.

Solution

We propose a rating agency which is decentralised and based on voting. This is augmented by voters who have a visible net worth. Investors may then choose how to invest based on the votes cast and also their own choices.

Hence for financial products which are grouped into one asset class based on risk and return, we can decentralise into an oracle the rating on these products. The advantage is then that investors globally including retail investors can invest and also small unknown investees can list their own assets.

This model extends the well known models to decentralised investment into new projects (eg startups). This project is about tokenizing **existing** assets and also financial instruments. This is a far more complex field than fundraising. The present fiat market for derivatives is 1.2 Quadrillion USD. This underlines how capital markets work by this sheer size.

Tokenization will allow far more complex products to be produced. It is for investors to decide on the risk levels, determine the risk levels, and what investments to make. These decisions are then factored into an oracle.

How to Implement

1. **Identity** - There are projects already working on KYC/AML and we cannot do everything in one project. We should focus on identity as a wallet which has a known net worth and is used for weighting any voting. A real project needs KYC added as an external service.

2. **Listing investments** - we need to list investments. Due to space limits, we need to use a hybrid solution. There are various options to explore.

a) Private blockchain, then linked to a public blockchain (hash), and a file storage system (IPFS).

b) Sidechains (which are private), but connected via a sidechain protocol to the mainnet, and then a file system such as IPFS.

c) A file system such as IPFS and then hash the contents (ie the address of the IPFS file) and then store that.

3. **Voting** - A smart contract to allow votes and match that to wallets and net worth. Hence a user posts an investment opportunity. The investors then vote and choose it. The investments are then all ranked by users.

4. **Grouping investments into "TRUSTS"** - This extends a simple vote to grouping up products. Hence if we have several assets all ranked similarly, we can group them and make a fund. The reason for this is liquidity. It means the token which is then issued will be liquid making it easy for investors to trade it.

The ranking could be done by more voting combined with a machine learning system which assessed risks. This would be empirical in nature. ie it would measure what votes took place when a investment was suggested (accept/reject rates) and then it make more suggestions. It would suggest only and not decide. This is a form of deep learning.

5. **Forming the investments** - once an investment is voted and the decisions are all made. We can then tokenize it. That can only be done via a **regulated exchange**.

But the votes and all the investment data can then be put into a portfolio and presented for the actual tokenization eg via securitize, polymath, tZero, OpenFinance or direct to an exchange such as GBX.

6. **Tracking investments** - then once the investment is "live" it can be tracked. All incomes can be posted by an authorised party (eg a lawyer), and then all incomes paid to the investors. That is a fiat based transaction. For example, if a block of flats is tokenized, the rents would be paid into a trust managed by a lawyer (who is insured against negligence claims), and then the rents are paid to the investors.

The trust details would be held on the blockchain and the rent transactions all posted too. That is really a separate project. The decentralised rating agency would focus on building portfolios and a second project would focus on managing the investment. The investment could be varied and re-capitalised and hence steps 1-4 would be repeated into a new derivative (which is common in the fiat world).

Hence the investors would globally be able to diversify their investments.

Addressing Failures

These models have been tried before, but they were tried on an ICO basis, eg LA Token. They have all mostly failed.

Their main problem was fraud prevention. We solve that problem by using regulated institutions for the actual investments and also the tracking. A solicitor is an officer of the court and has insurance too. Hence there is a level of protection.

This solution we propose has several levels of protection for investors. It also allows far more capital to be derived and risk to be dispersed. This would assist growth and stability.

