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🚨 Alert! 🚨

There's a lot of fanfare surrounding the lending volume flowing through DeFi rails.

Something interesting is happening: Almost \$50B has been locked in DeFi lending vaults REALLY quickly.

Get your popcorn out...Red Pill "Week 5" thoughts on DeFi lending: 🧵 📌

Lending is one of the most important functions managed by the Banking ecosystem. We're starting to see the web3 world construct the foundational building blocks that will ultimately be used to manufacture and manage loans in a decentralized manner.

I have to start with a "no duh" statement that too many Investors and Founders don't do a good job of internalizing. It's the foundation of every lending business. Effectively Lego block #1.

Simply put: Lenders sell capital.

A lending company doesn't own the capital it sells. It needs a sourcing strategy that's reliable, deep and cost efficient. Banks do this through 50 X 50 boxes on street corners. Non-bank lenders borrow money from capital providers. And DeFi lenders can vault tokens.

But the capital strategy is only one piece of the equation. The exchange of money today for a stream of payments in the future requires mastering the statistical analysis of variable outcomes based on predictive drivers. Outputs are a function of inputs.

Lending companies advance capital to borrowers today in return for a stream of payments that will vary based on future market conditions, economic scenarios and borrower characteristics. The volatility of future payment streams is what makes lending challenging.

The output (repayment) is a function of inputs (ability to pay, payment patterns, stability of income, value of collateral). Most inputs are sitting in databases that are referenced using private information about a person.

Therein lies the DeFi narrative violation.

Because of this, the DeFi world has “solved” lending through a complete reliance on collateral vs. an analysis of the borrower’s likelihood to repay. If there’s enough collateral “vaulted”, then instance of default doesn’t matter because severity = \$0.

From what I’ve seen, right now every “loan” made using DeFi rails falls into the bucket of Over-collateralized lending (OCL). OCL is designed to “lend” money if and only if the collateral vaulted is worth more than what it would take to cover losses in cases of default.

OCL is a niche form of lending. It isn’t a product meant to be a mass-market solution to a mass-market problem. Most borrowers take loans because they live lives of modest excess (if any) and don’t have collateral to pledge. They buy things now and pay for them over time.

But many early crypto adopters have a lot of digital wealth that they don’t want to liquidate to buy goods and services with. They believe the value of their tokens will only increase and therefore converting tokens to fiat and fiat to goods and services is a bad trade.

This makes no sense if you consider tokens to be currency, but it kind-of-sort-of makes sense if you think of tokens as assets. If 1 BTC = \$50K and you think it will be worth \$100K in a year then you probably would prefer to hold the token than to spend it now.

Goods and services bought using OCLs become less expensive over time if vaulted tokens rise in value and more expensive if they lose value. This is a “value trade” for the borrower but the OCL lender isn’t affected because the trade has been manufactured to produce zero loss.

It also can’t be ignored that a big use of proceeds of OCLs has been to provide additional leverage to token holders (to buy more tokens). And another major value proposition is the avoidance of taxes that result from the conversion of tokens to fiat.

But even though there’s a lot of OCL volume being manufactured in today’s DeFi ecosystem, the promise of “decentralized loans that don’t rely on Banks” will require a DeFi version of mainstream underwriting technology and loan management infrastructure to be built.

Under-collateralized lending (UCL) relies on being able to statistically and accurately predict the repayment rate of a prospective borrower. At the core of this new infrastructure will be a DeFi version of “truth files” that can be used as the basis for creating risk models.

So what is a “truth file?”

Simple definition: “A truth file contains data that without need of additional confirmation can be considered factual.”

Not all truth files are 100% accurate and not all are valuable, but the best ones can be transformational.

The operative question that defines how valuable a truth file is: “What does the truth file reveal that can be used as a substitute for investigative work or can be used to make more accurate decisions?”

The first reduces friction and the second improves outcomes.

A profound issue that makes many truth files less useful is that they can only describe the present and are unable to describe the past. For products like lending, without being able to score the past you can’t correlate the truth file to known outcomes. This matters!

Credit bureaus are truth files for the liability side of a consumer’s balance sheet. They contain treasure troves of mostly accurate information supplied by major financial institutions in a highly organized fashion on a regular basis.

Credit bureaus can be pulled in batch from organizations with “permissible use” (low friction to access) and the data exists going back decades (ability to look into the past).

While there are errors in bureau data, it’s proven to be quite accurate and valuable in correlating past behavior with future outcomes. The value relative to cost is very easy to justify. The mass-market availability of lending products wouldn’t exist without the bureaus.

Another example would be cash-in and cash-out transactions from a consumer’s primary checking account. This data is the core of an amazing truth file that can be analyzed to understand many important things about how a consumer is living his/her life.

It can be used to answer questions like: Is the consumer currently solvent (i.e. – monthly inflows exceed monthly outflows)? How regular is their income? Are they moving excess income to savings or investment accounts? Do they have insurance? Are they a homeowner?

So, a useful exercise is to think about how truth files could be created and/or accessed in the DeFi world where anonymity is a first principle. Wallets can be spun up and down with ease and linking TradFi data sets to web3 identities requires a new architecture.

I don’t have “the definitive solution” but I do have a few thoughts.

It's highly possible that OCLs will expand by allowing other forms of collateral to be "vaulted" starting with assets that have "on chain titles" that can be re-assigned using smart contracts. On-chain mortgages and on-chain auto-loans would be representative examples.

It's highly possible that "ask and answer" technologies will play a pivotal role in how traditional truth files are used in DeFi UCL underwriting (i.e. - protocols built using zk-Snark proofs). Look. Underwrite. Forget. Single use of sensitive data might work for the masses.

It's highly possible that "open with permissible use" primitives will be built that allow for truth files/personal information about an individual to be locked away and only revealed for systemic compliance testing and in case of default (for collections activities).

It's highly possible that a borrower's on-chain activity will provide additional signal to an UCL lender's risk models and be used as inputs to a modern, web3 risk scoring system.

It's highly possible that a DeFi version of the age-old system of "blacklists" will emerge that punishes bad borrowers (and wallets) and only allows them back into the system when old debts are repaid.

It's highly possible that DeFi lending will first take root in countries with less rigid Regulatory oversight. Countries with strong frameworks around permissions (licenses), identity (KYC) and protections (AML, Fair Lending, UDAAP) will study and learn before adapting (or not).

What is clear is that the ultimate promise of DeFi will never be realized (Banking without Banks) unless a DeFi version of UCL lending emerges that resonates with the wants of the web3 community and is compliant from a Regulatory standpoint.

With this said, I'd love to talk to anyone working on technologies and functionality in the DeFi UCL lending space. Maybe [@QEDInvestors](#)' 150+ years of combined lending experience would be helpful to a DeFi Entrepreneur in some small way!!!

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