



CAMBRIDGE
CRYPTOGRAPHIC

Laying the foundations for cryptocurrencies of the future



Replicating Central Bank Risk-Free Rate in DeFi

The Problem:

The missing piece in DeFi is a “risk-free” interest rate on stablecoins

The Significance:

1. Guaranteed return of principal + “risk-free” interest.
2. Crypto portfolios can select any level of risk (thus far only choice is high or very high risk)
3. Very low risk-profile may permit regulated institutions to participate (custodians, banks, etc)
4. Integration with DeFi can stabilise the whole of crypto
5. All this... drives huge demand for the stablecoin (and the underlying native token)

How?

- Validators require balance of both native token and stablecoin to earn block rewards
- Delegated stablecoin = delegator retains full custody; validator shares “risk-free” block rewards



Risks compared to current DeFi?

1. **No default risk. This is not a lending protocol!**
 - a. Delegation = Retains full custody. No risk of irretrievable deposit from liquidations
2. **De-pegging risk**
 - a. Reduced risk of de-pegging. A risk-free rate increases demand & liquidity of stablecoin.
3. **Technology risk**
 - a. Same as rest of DeFi. Can be minimised with audits, code maturity and insurance
4. **Cryptocurrency price risk**
 - a. Not Applicable. Principal is stablecoin which should maintain stable price
5. **Risk of interest rate trending to zero**
 - a. Low. Returns come from block rewards and transaction fees.
 - b. Unlike stablecoin swaps, returns do not reduce if stablecoin has better peg



Let's talk returns

Returns will come from block rewards

Block rewards are dependent on inflation schedule and transaction fees

Validators will share block rewards with delegators

- ~10% commission (standard rate across DeFi)
- ~50:50 split between delegators of stake, and delegators of stablecoin

Estimate of APY

- Will fluctuate depending on risk-free rate vs risky rates
- Paid out in native token (APY requires conversion to stablecoin unit)
- May reflect sovereign bonds market in normal times



Business Plan

Where we are at:

- Pre-seed funding from private investor
- 5 patent applications filed with European Patent Office, PCTs planned

Near term plans:

- Implementing PoC - particular focus on integration with wider DeFi
- Economic modelling - has application for CBDCs
- Raising our profile - hiring marketing talent
- Bringing onboard strategic investor / advisor

2 options for go-to-market strategy

- IP licensing and consultancy for stablecoin issuers (e.g. Terra, Binance, etc)
- Deploy our own blockchain



Further Material

Whitepaper - A market determined risk-free interest rate

http://files.cambridgecryptographic.com/whitepapers/risk_free_v0.4.pdf

Website

<https://www.cambridgecryptographic.com/>

Blogs

<https://blog.cambridgecryptographic.com/>

Contact Us

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