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Emergy

Stable coin case study: Basis, and lessons learned

for George Brown College students

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The Art and Science of Eternal Blossom



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Basis: a price-stable cryptocurrency with an algorithmic central bank

Basis (formerly Basecoin) was proposed as a stable coin relying on algorithms. The coin could be pegged to any asset or basket of assets.

The Basis white paper (2017) is available at
<https://www.basis.io/basis-whitepaper-en.pdf>



The reveal

From Coindesk (2017)

An all-star cast of investors has backed a little-known startup behind a token called basecoin.

Scheduled to debut with a white paper release on Tuesday, the project, the first from Intangible Labs, boasts investors including 1confirmation, Andreessen Horowitz, Bain Capital Ventures, Digital Currency Group, MetaStable Capital, Pantera Capital and PolyChain Capital.



The vision: an autonomous and decentralized central bank

From the white paper

"Basecoin would present the world with both the technology and the opportunity to develop an independent, transparent and potentially more stable monetary policy than anything that's ever been possible via central bank"



The team

- Nader Al-Naji, ex Software Engineer at Google, Princeton Computer Science and Maths
- Lawrence Diao, ex Software Engineer at Google, Princeton Computer Science Summa Cum Laude
- Josh Chen, ex machine learning engineer, Princeton Computer Science Summa Cum Laude
- Susan Sidd, ex Managing Director and Legal Director at Goldman Sachs, JD from Harvard
- and other <https://www.basis.io/#team>



the project

In June 2017, there were only a handful of stable coins (Tether, BitShares/BitUSD). Maker DAO would issue its white paper later, in the last month of 2017.

Today, more than 50 stable coins have been identified (Sam, [2019](#)).



The technology

Basis is not backed by fiat or cryptocurrencies. It relies on **Seigniorage** principles and algorithms.

The protocol would watch indices (e.g. US Dollar). It would leverage oracles to contract/expand its token supply to control its token value (e.g. exchange rate with the US Dollar).

Three tokens:

- basecoin is the first token considered, pegged to 1 USD
- base bonds used to managed the volatility of basecoin
- base shares idem



Governance and use of the proceeds

They included a return of capital clause in their papers for the raise (see next slide).



ICO (fundraising) process

Basis raised \$133 million from VCs including Andreessen Horowitz and Bain Capital Ventures.

The project ended December 13, 2018 with a letter available on the first page of the website at <https://www.basis.io>.

Basis returned the money to investors.



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Securities regulation

Basis (the coin) wasn't viewed as securities by the US regulator, but the bond and share token were.

Therefore, only accredited investors should be allowed to participate, hence the need for a centralized system to manage access. This impacts not only security but liquidity.

To make matters worse, this 12-month restriction after the security is issued would be permanent for Basis tokens, since they would be issued on a continuous basis.



What went wrong?

Discussion



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Alternative paths

Maker DAO uses Collateralized Debt Positions (CDPs). We'll discuss the white paper shortly.

UMA uses facilities to issue non-fungible tokens (contrary to Maker DAO) and actively pursues research on securing oracles with economic incentives.



Central Banks are paying attention

Christine Lagarde (former head of the IMF and now at the ECB) has been keen to the use of Blockchain by central banks (2017). The IMF has published a staff discussion note on the topic of Central Bank Digital Currencies (2018).

Potential benefits:

- financial inclusion
- security and consumer protection
- privacy

Obviously, there are also risks for central banks: loss of control on currency, inability to remain the lender of last resort. . .



The Bank of Canada

Bank of Canada exploring digital currency that would replace cash, track how people spend money

An internal Bank of Canada presentation says benefits of a digital currency include the sharing of personal information with police or tax authorities



Stephen Poloz, governor of the Bank of Canada, right, and Carolyn Wilkins, senior deputy governor at the Bank of Canada. The Bank of Canada is considering launching a digital currency. David Kasson/Bloomberg/Flora

Figure: Schwartz, 2019

The Bank of Canada has explored the digital currency space since 2012. Current discussion involves sharing information with law enforcement and tax authorities.



The New York Times

China's Cryptocurrency Plan Has a Powerful Partner: Big Brother

Facebook's Libra project led Beijing to accelerate its efforts. The government could soon know a lot more about how people are spending.

Figure: Zhong, 2019

See also Castillo's article in Forbes (2019).



Other countries

- Switzerland
- Sweden
- Singapore
- Philipines



Thank you!

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