Ponzi schemes hit highest level in a decade, hinting next 'investor massacre' may be near -CNBC Feb. 25, 2020



Co-Founders of Alleged \$9 Million Crypto Ponzi Scheme Plead Not Guilty-CoinTelegraph.com Mar. 5, 2020 Singapore cops seize \$27million linked to China Ponzi scheme – The New Paper Singapore, Feb. 11, 2019

Unlicensed Digital Investment Schemes:

Prevention Tools are There; Users are Needed

Millions of people fell for crypto-Ponzi schemes in 2019 MIT Technology Review, Jan. 30, 2020 PlusToken Scam Moves \$123M in Bitcoin Just as BTC Price Regains \$10K-CoinTelegraph, Feb 11, 2020

A little about me & my interest in UDIS



- Public interest & consumer protection lawyer;
- Past 10 years working as independent consultant on financial consumer protection, financial literacy & access to redress for consumers; and I have a non profit association GALA.
- Saw first hand the horrific impact of ponzi schemes on victims in 2014

GALA tried to assist victims of a scheme called Caring for Orphans, Widows and the Elderly in Uganda. Purported to be a MFI, stole upwards of \$7m from the very poor. Victims took loans to 'invest.' Lost everything+.

https://www.theguardian.com/global-development-professionals-network/2016/jan/13/ugandan-victims-still-fighting-for-compensation-years-late-cowe

FIGI SIT WG Report on UDIS

- Working group did research on the issue in 4 countries (Kenya, India, Bangladesh & Nigeria);
- Findings: many state agencies and regulators with a mandate to take action v. UDIS, but no apparent coordinated preventative action.
- Prosecutions are few and not reimbursing victims.
- There was also evidence of ongoing or recently crashed UDIS during the research period. One long running scheme, MMM was born again during the FIGI WG research; 6 months of operations resulted in >\$70m in USD stolen from Nigerians. Six months and that was one scam of hundreds going on.

An ounce of prevention = millions of pounds of cure

- The FIGI WG report can be downloaded here:
- https://www.itu.int/en/ITU-T/extcoop/figisymposium/Documents/ITU SIT WG Unlicensed%20Di gital%20Investment%20Schemes f.pdf
- There are 13 recommendations for better protection of digital financial consumers from UDIS in the report.
- The report includes recommendations for regulators and also for national and international collaboration on UDIS.
- Today's presentation will focus on feasible, preventive steps & tools which could be used to combat UDIS before they steal million\$

Prevention should focus on the social network engagement & accountability

- Internet and social networks allow for these frauds to reach a wider audience. And, to operate simultaneously in multiple jurisdictions.
- Schemes are promoted on Facebook, YouTube, Instagram, and even Twitter and in closed Whatsapp groups.
- Despite Facebook/Insta/Whatsapp Terms & Conditions banning misleading financial ads, these pages are readily found online and it does not appear the community standards are enforced.

6. Fraud and Deception

In an effort to prevent and disrupt harmful or fraudulent activity, we remove content aimed at deliberately deceiving people to gain an unfair advantage or deprive another of money, property, or legal right ... https://www.facebook.com/communitystandards/fraud_deception

Prevention also means surveillance & identifying possible UDIS

- Identification can be done by the bytecode for scams on blockchain
- Study from Uni Cagliari, Sardegna focused on detection of ponzis on Ethereum: searched for contracts whose bytecode (which is always stored on the blockchain) which is similar to that of a known Ponzi scheme: using the normalized Levenshtein distance (NLD) to measure similarity between two bytecode files.
- NLD is a measure of the difference in characters in data strings—how many characters u have to change to transform an apple into a strawberry (large). Or, a ponzi into bonzai = 2 character changes.

^{**}Study used differential of less than .35 NLD from known ponzis.

Continual monitoring of blockchain transactions: how?

- Researchers from Berkeley, Qatar, Luxembourg & SL analyzed the scheme from Sept, '14 June, '16 and published in November of 2019.
- The study conducts temporal analysis of MMM operations; suggests metrics for investigating crypto ponzis & shares their data linking to bitcoin addresses to MMM
- https://arxiv.org/pdf/1910.12244.pdf
- Viewed 2.5M user profiles on BitcoinTalk, a discussion forum, searching for Bitcoin addresses associated with MMM members, ending up with 15,736 addresses.
- Extracted the corresponding transactions from Bitcoin's blockchain, ending up with 422,953 transactions.

Blockchain researchers findings on UDIS:

- 41% of participants did not receive any returns in the MMM Cooperation: researchers identified probable scammers as their addresses only received transfers.
- The top-earning scammer made \$765K dollars in profit.
- At its peak \$150 million was transferred per day.
- The scheme had participants from 80 different member countries on 5 cont. but a highly-asymmetrical flow of money between them.
- While India and Indonesia have the largest flows in MMM, Indonesian members received 12x more money than they transferred.

Another monitoring tool/strategy: consumers' chatter

• As mentioned: social networks are where the UDIS are promoting. Counter narratives to engage consumers and awareness raising/education has to happen there.

• 'Did you see my Tweet?' research done by Rafe Mazer when @ FSDT shows how to effectively monitor consumer posts on social networks and engage with them. Rafe is now with IPA & here to talk about this research.

Where there is a will ...

There are existing tools and more can be developed if there is interest to do so to prevent/combat UDIS.

No reason to believe the criminals will stop on their own bc in 2019,

Cryptocurrency scammers stole \$4.3 billion worth of digital money. In 2019, more than triple 2018's crime volume. A large measure of this money will likely fund other crime; purchases of jets/real estate and doubtful if taxes will be paid on these funds.

Data on annual crime proceeds is from blockchain analytics firm Chainalysis, "The 2020 State of Crypto Crime."

Many thanks for your interest in UDIS prevention!



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