UNIVERSITÄT LIECHTENSTEIN

Auction design settings and investor behavior of small and large token sales

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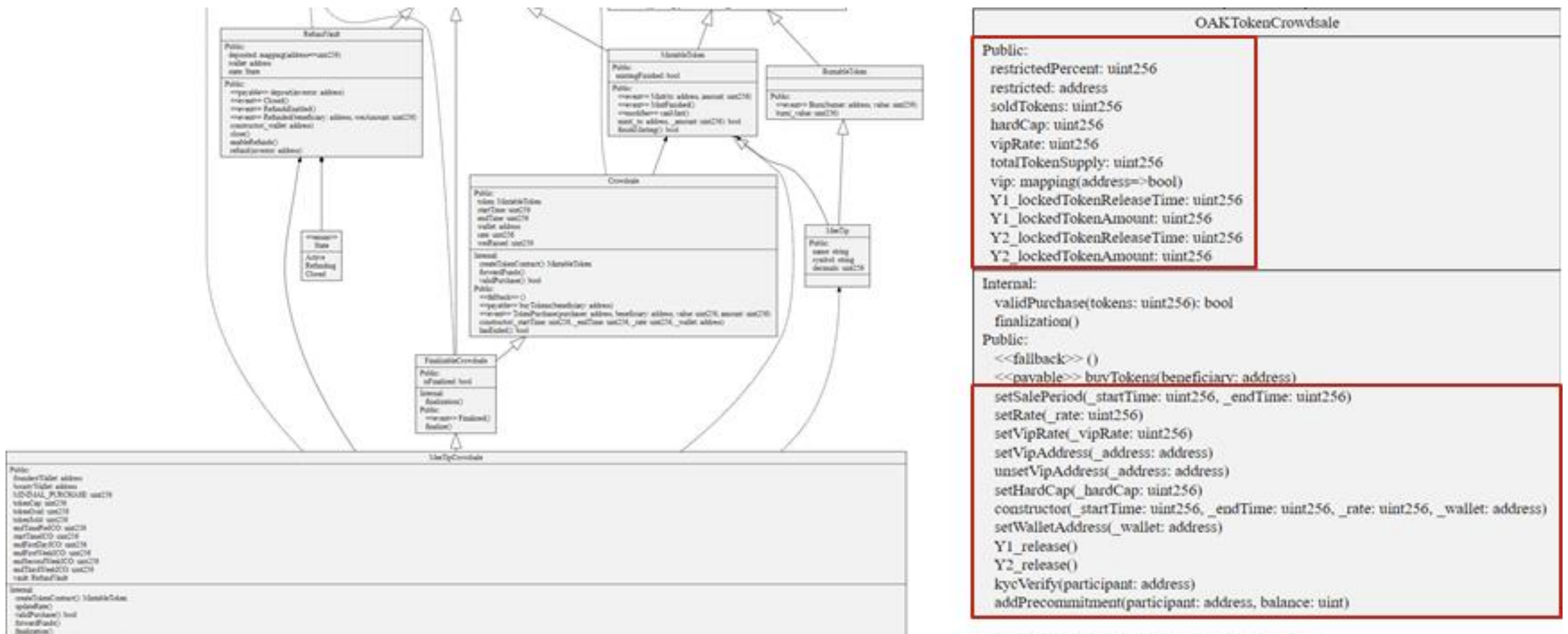
Digital tokens are distributed to a group of investors through a token sale offering. These tokens are built on blockchain technology, which is a decentralized, distributed, and completely traceable peer-to-peer system that does not rely on a central, trusted authority, as explained by Adhami et al. (2018) on pages 2-4.

Example of a Smart Contract:



Acorn Collective Token Sale converted in UML.

What makes Token Sales so special?

- The design of the token Issuance process is **hard coded (in Smart Contracts**)
- The wallets (investors) who buy the tokens are fully **traceable.**
- A very high number (>400) during a very short time horizon (<1 year) makes them **comparable**
- Between January 2016 and August 2019, over USD 31bn were raised via Token Sale Offerings (Howell et al., 2020, p. 3926) which makes them **relevant.**

Data:

- Primary data of more than 27,700 lines of code from 425 ICOs between July 30, 2015 and June 2019

Findings:

- > 25% of all ICOs implemented MultiSig
- > 20% of ICOs require KYC or/and Whitelisting
- > 19% have a pricing strategy
- > 20% have a hard cap and 6% a soft cap
- > 15% have implemented a referral or bonus program

Other Hypotheses:

- H1: - Funding Amount positively impacted by a KYC/Whitelisting, Referral scheme, and Incentives/ Vesting – partially accepted
- H2: - No of Transactions are positively impacted by Security, referrals, discounts - rejected
- H3: - No of Transactions are negatively impacted by KYC/Whitelisting and a Hard cap - rejected

Forschungsförderungsfonds

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