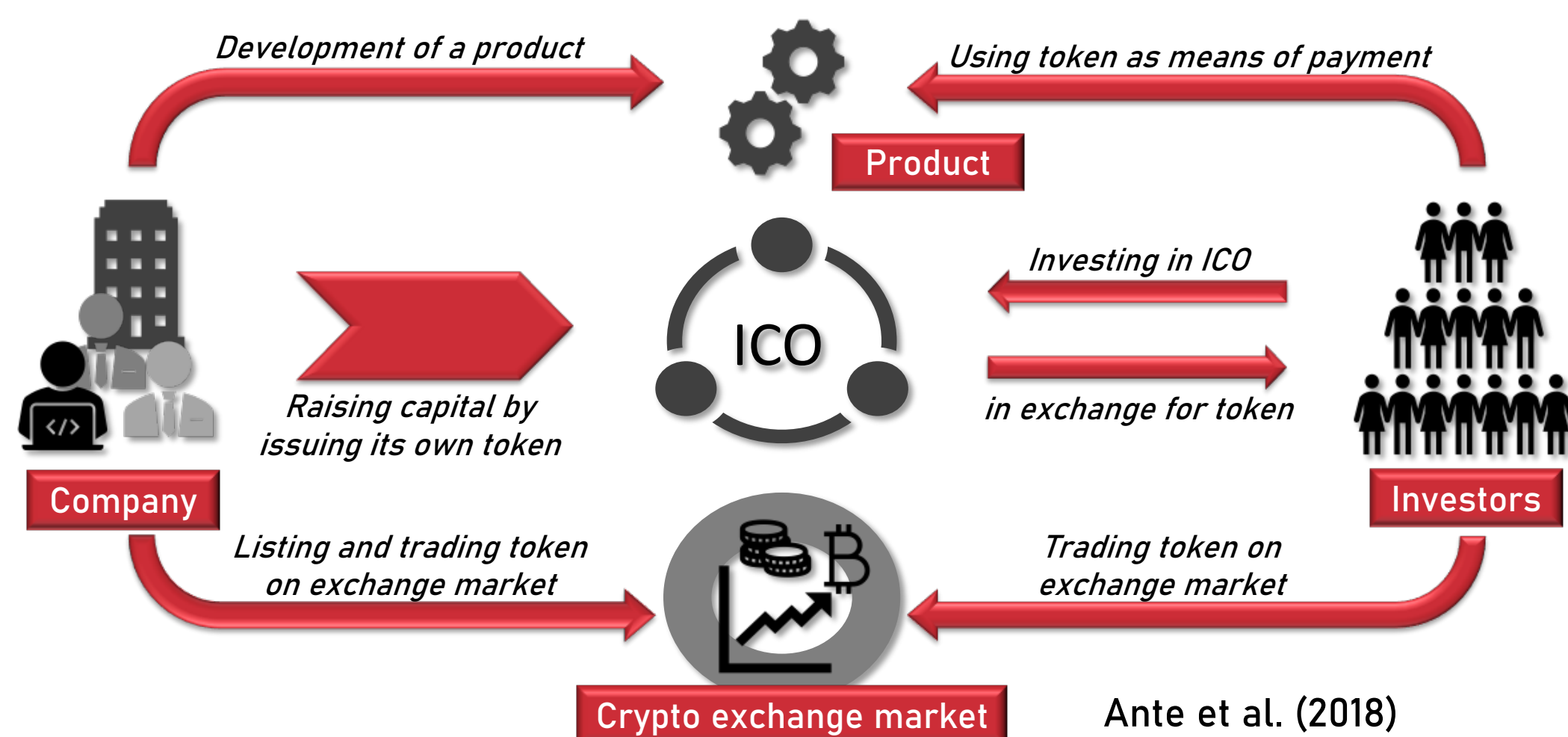


Initial Coin Offerings, Information Disclosure, and Fraud

Conditionally accepted by *Small Business Economics*

Lars Hornuf, Theresa Kück, Armin Schwienbacher

What is an ICO?

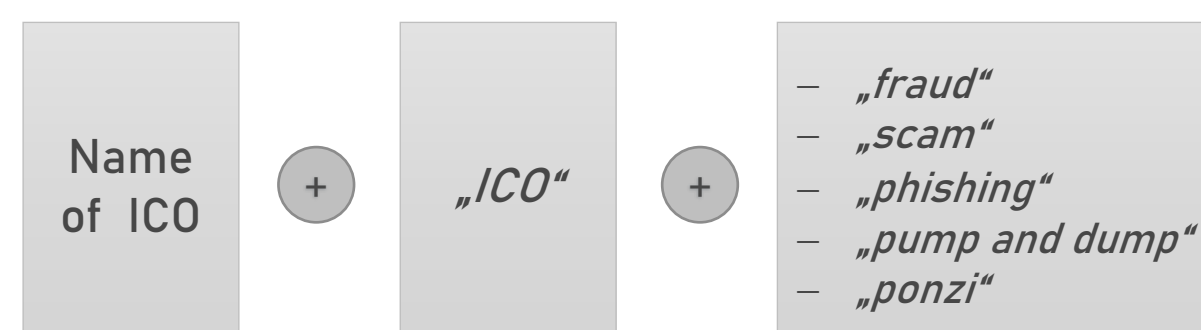


Different types of fraud on ICO market

- Exit fraud:** disappearance of founders after raising capital
- Security fraud:** offering of unregistered security-like token
- Ponzi scheme:** paying promised profits to earlier investors with funds of more recent investors
- Pump and Dump:** artificially inflating token-price through false information, in order to sell the token that was initially cheaply bought at a higher price
- Phishing / Hacking:** phishing mails, fake social media accounts, hacking into company's IT systems, exploiting smart contract bugs

Data collection

- Sample of 1,393 ICOs, listed on Icobench.com and Icorating.com and ended fundraising before July 1st, 2018.
- Extensive search on Google to identify fraud cases with the following words for each ICO:



The extent of fraud

TABLE 1: Distribution of Fraud Cases Identified (N = 1,393)

Multiple fraud types are possible for an ICO.

Fraud Type	No. Suspected Cases	No. Confirmed Cases
Exit Fraud	21	25
Security Fraud	13	3
Ponzi Scheme	27	0
Pump and Dump	31	1
Phishing / Hacking	28	128
Other Types	68	18
Total	188	175
Percentage of sample	13.5%	12.6%

Results

- Contrary to the ICO literature, which says that disclosing the ICOs smart contract on Github is a sign of transparency and trustworthiness (Howell et al., 2020), our results show that it increases the probability of fraud.
- ICOs with higher funds raised are associated with a greater likelihood of fraud.
- Fraudulent ICOs are 11.5% more likely to be listed on a crypto exchange market.

Conclusion & Policy Implications

- The extent of information disclosure offers little opportunity to identify fraudulent ICOs.
- An in-depth due diligence of the ICO and its whitepaper is necessary to ensure its legitimacy, e.g., by institutional investors (Momtaz, 2020) or specialized platforms to run background checks.

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