Discussion:
Do Tokens Behave Like Securities? An Anatomy of Initial Coin Offering

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Overview

• Premise: Document price patterns of ICOs
• Herculean data effort
  • 18 data sources, August 2016 to November 2018
  • 600+ ICOs with wallet information
  • 800+ projects with commits on GitHub
  • Almost 2000 ICOs with social media activity
  • 2,000+ listed coins and tokens with pricing data
  • 1,000+ ICOs with available white papers
  • 3,000+ ICOs with location information
• First comprehensive comparison of different data sources
Overview

• Findings:
  1. ICO success increases in the certification by institutional holdings and decreases in the amount that the project is attempting to raise.
     • High information asymmetry
  2. Project-related social media activity and source code outputs peak right at ICO
     • Consistent with last minute work (and the fact that you need to push code to actually deploy the ICO) & PR schemes
  3. Project output drops after ICO
     • Similar to IPO, but also consistent with scams
  4. ICOs have higher variance and reversions/drifts than IPOs
     • How does it compare to pink-sheet listings?

• Liquidity increases in ICO underpricing, amounts raised, social media activities, and the number of wallets associated.
  • Washed trades?
Background

- From blockgeeks.com
- Due to additional legal obligations, unsurprising why everyone wants to be a utility token if possible.
- Additional burden:
  - Regulation A+
  - Regulation D
  - Regulation S

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<thead>
<tr>
<th></th>
<th>Utility Tokens</th>
<th>Security Tokens</th>
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<tbody>
<tr>
<td><strong>Purpose</strong></td>
<td>Helps in funding ICOs and also creates an internal economy within the project's blockchain. Holding it will also give the user certain voting rights within the ecosystem.</td>
<td>An investment contract which represents legal ownership of a physical or digital asset that has been verified within the blockchain.</td>
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<td><strong>Expectations</strong></td>
<td>There is no relationship between the value of the token and the current state of the company's valuation.</td>
<td>The token's value is tied directly to the company's valuation. More valuable the company, more valuable its token.</td>
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<td><strong>Scam Potential</strong></td>
<td>Since they are relatively unregulated, scammers have been known to create bogus ICOs and tokens just to make some quick money and leave</td>
<td>Since these are heavily regulated, the chances of a security being a scam is infinitesimal.</td>
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<tr>
<td><strong>Regulation Status</strong></td>
<td>Relatively unregulated since it is pretty tough to create regulations for ICOs.</td>
<td>The company and investors must comply with the Howey Test.</td>
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Comments

1. Legal Uncertainty
2. What is the goal?
3. Theoretical Underpinning
4. Intermediaries
1. Legal Uncertainty


• We would expect ICO price movement to depend on the current legal perspective.

• Structural Breaks: SEC FinHub on April 3, 2019, published guidance on when a blockchain-enabled digital asset will, or will not, be considered a security.
  • Look for changes in average returns and variance

• Or around big events like the scam of BitConnect, or high profile wallet hacks
2. What is the goal?

• Howey Test: 1946

• According to the U.S. Supreme Court’s decision in the case of SEC against Howey in 1946, a transaction is an investment contract if the following criteria are satisfied:
  1. there is a monetary investment,
  2. there is an expectation of profits from this investment,
  3. the investment is in a common enterprise, and
  4. any profit from it is a result of efforts of a third party.
2. What is the goal?

• This paper:

IF IT SOUNDS LIKE A DUCK, MOVES LIKE A DUCK, LOOKS LIKE A DUCK

IT'S PROBABLY A DUCK
2. What is the goal?

• Clarification: all tokens are coins, but not all coins are tokens.
  • Tokens are associated with a platform
  • E.g. BTC, ETH are coins can be used outside their platform.

• The argument:
  1. If something is a security → they must behave like securities.
  2. If all tokens are securities → they must behave like securities.

• IPOs are securities → they must behave like securities.

• This paper is about the “converse”:
  If ICOs behave like IPOs, they are securities.

• Is this about whether ICOs are securities, or trying to understand investor psychology?
  • Characterize time-series clustering & draw parallels with IPOs during the dot-com era, pink sheets listing price behavior, or even the tulip mania?
3. Theoretical Underpinning

- Borderline Analogy: Tesla Model 3, announced on April 3, 2016

- Differences: can’t trade reservations on secondary market.
3. Theoretical Underpinning

• Potential theoretical motivations:
  • Leland Pyle (1977) for IPOs analogy is insider subscribers of ETH-based ICOs (Lee, Li, and Shin 2018)
  • How many coins were floated vs. how many are in circulation? (including hard caps for issuances?)
    • Fundamentally different economics to share issuances
    • Consider splitting sample based on ICOs with hard caps and those without
    • For each token, impact of forking competition (Abadie & Brunnermeier 2018)
  • Cong, Li, Wang 2018: Two implications of tokenization
    • Accelerate adoption by allowing early users to capitalize on later productivity through prices of the tokens.
    • Reduce volatility of adoption
• What price is right? Depends on the type of token & its details.
4. Intermediaries

• What is the role of financial intermediaries in the ICO market?
  • In IPO, have underwriters who find buyers.
  • Regulations designed to protect outside shareholders.

• Over 75+ ICO marketing agencies
  • Full-service (each stage)
  • Pre-sales
  • Pre ICO
  • Post ICO
  • Business looking to have an ICO

• How much of this is mechanical?
4. Use of ICO PR Companies

- Top 5 Agency on Moonrate, Trackico, Icoholder
- FREE trials
- 41 759 793$ raised by clients
- 2 years of experience
- 30 clients
- 25 fundraising services
- 8 experts in team
- Personal managers
4. Use of ICO PR Companies
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Telegram promotion

Members for telegram group (chat) or telegram channel

- 100 members = FREE TRIAL 🔥
- 5000 members = 200 EUR
- 10,000 members = 350 EUR
- 20,000 members = 650 EUR
- 40,000 members = 1,200 EUR

Telegram pump

- 1 day = FREE TRIAL 🔥
- 40 messages / daily = 190 EUR / weekly or 790 EUR / monthly
- 80 messages / daily = 360 EUR / weekly or 1,500 EUR / monthly
- 160 messages / daily = 680 EUR / weekly or 2,800 EUR / monthly
- 300 messages / daily = 1,300 EUR / weekly or 5,300 EUR / monthly

Success case

Telegram moderation

- 8 hours / daily = 950 EUR / monthly
- 24 / 7 = 1,700 EUR / monthly
By the way is it fixed in ETH or USD?

I couldn't find in imtoken what erc wallet u use?

By the way is it fixed in ETH or USD?

The threshold of ETH raised will be calculated 24 hours before the final token sale based on average USD/ETH rate on the exchange with highest rank of ETH 24h trade volume. The token sale will be completed when all collected funds nominated in ETH will exceed the threshold.

Whats your hard cap?

Hardcap is 9000eth

So we have increased the activity there up to 40 messages a day. Questions look smart. Noone will ever find them suspicious — they are 100% human like and done by humans.
Sure. I do not know how the telegram marketing works, so I was hoping you can explain the timing.

it depends on what your aims are

some people come to us just to make number of people higher

so that other people more likely join their chat

in this case we recommend bots

40 000 members = 1 200 EUR speed is 20k people per day

and it is safe

sometimes people want real users

then we do inviting

we take people from any chat our clients wants

the speed of inviting is 200-300 people per day and the price for 40k people is 6400 EUR

optimal decision is taking 20k or 40k bots and 10k invites

Do people typically stop the pump after the ICO?

what do you mean by "stopping the pump"?

I mean the subscription

6400 is for one time boost, or do the bots remain as subscribers to the telegram channel?

i see now

if you buy bots - they never unsubscribe and we give a 100% guarantee that this number will always remain the same

if we invite real people from other chats - then up to 10% may quit the group - there is nothing we can do with that
Overall

• The paper studies a host of empirical facts in the ICO market from 2016 through 2018.

• Authors are careful to cross reference the dataset
  • Documenting data issues is informative to other researchers

• Great start. Finding the right theoretical foundation seems difficult to me at this point.
  • But likely the authors are much better.