

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

	Utility Tokens	Security Tokens
Purpose	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.	An investment contract which represents legal ownership of a physical or digital asset that has been verified within the blockchain.
Expectations	There is no relationship between the value of the token and the current state of the company's valuation	The token's value is tied directly to the company's valuation. More valuable the company, more valuable its token.
Scam Potential	Since they are relatively unregulated, scammers have been known to create bogus ICOs and tokens just to make some quick money and leave	Since these are heavily regulated, the chances of a security being a scam is infinitesimal.
Regulation Status	Relatively unregulated since it is pretty tough to create regulations for ICOs.	The company and investors must comply with the Howey Test.

Comments

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

1. Legal Uncertainty

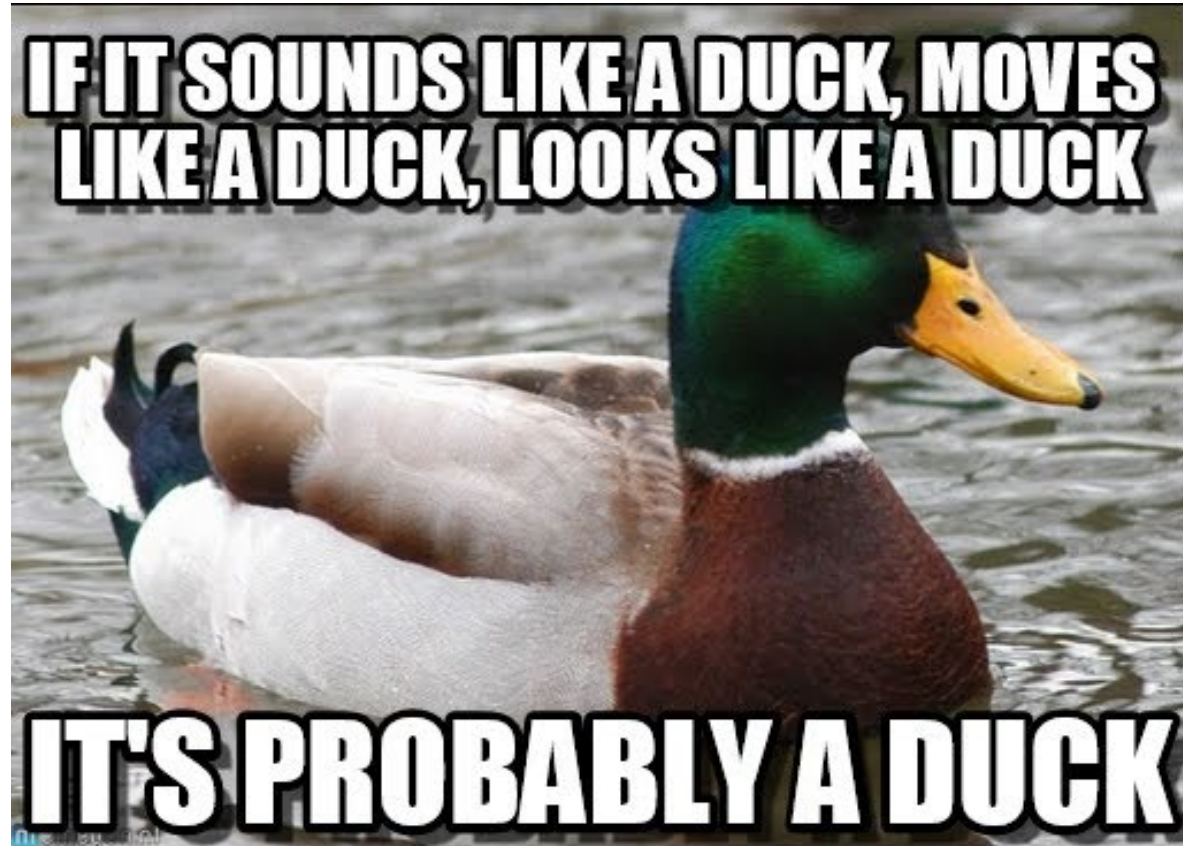
- Second piece of guidance: “Framework for ‘Investment Contract’ Analysis of Digital Assets”
- We would expect ICO price movement to depend on the current legal perspective.
- Structural Breaks: SEC FinHub on April 3, 2019, published guidance on when a blockchain-enabled digital asset will, or will not, 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:



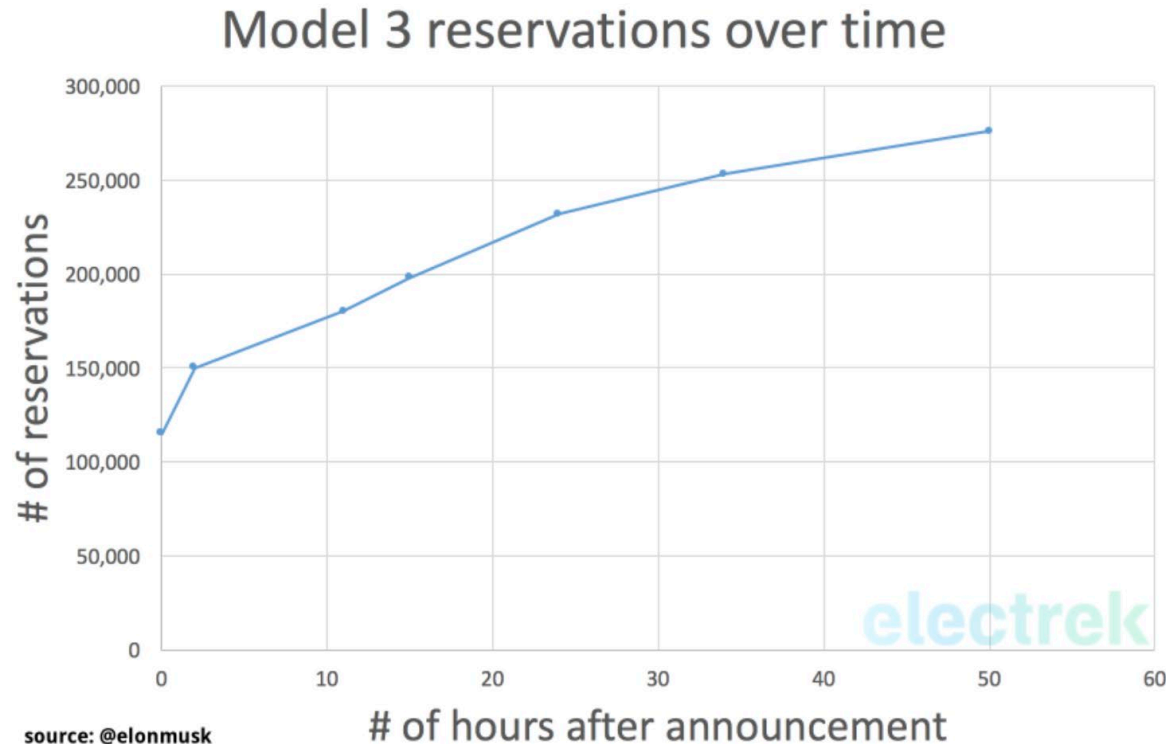
2. What is the goal?

- 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

The screenshot shows the Flexe.io website. The header is a blue bar with the Flexe.io logo on the left, which includes the text "Full-stack ICO/STO/IEO marketing". To the right of the logo are navigation links: "About", "Bundles", "Services / Prices", "Clients", "Cases", "Blog", and "Contacts". On the far right of the header, there are contact details: an email icon followed by "ico@flexe.io" and a location pin icon followed by "@flexe_agency".

The main content area features eight white cards arranged in a 2x4 grid, each with a blue icon and text:

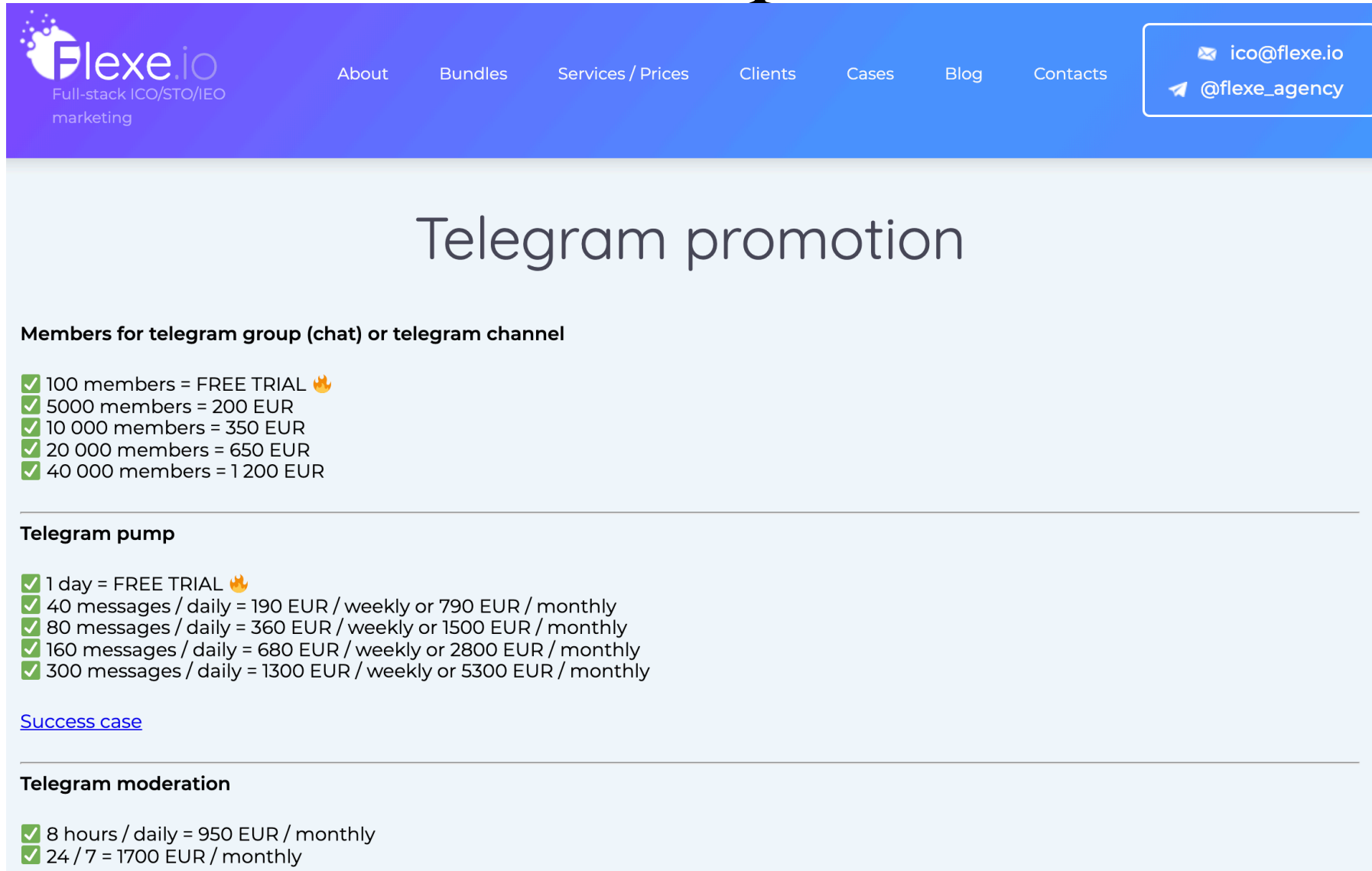
- Card 1:** Icon of a trophy. Text: "Top 5 Agency on Moonrate, Trackico, Icoholder".
- Card 2:** Icon of a price tag. Text: "FREE trials".
- Card 3:** Icon of a briefcase with a dollar sign. Text: "41 759 793\$ raised by clients".
- Card 4:** Icon of a birthday cake. Text: "2 years of experience".
- Card 5:** Large number "30". Text: "30+ clients".
- Card 6:** Icon of a piggy bank with coins. Text: "25 fundraising services".
- Card 7:** Icon of three people. Text: "8 experts in team".
- Card 8:** Icon of two people with arrows. Text: "Personal managers".

4. Use of ICO PR Companies

The screenshot displays the Flexe.io website, which specializes in full-stack ICO/STO/IEO marketing. The navigation menu includes links for About, Bundles, Services/Prices, Clients, Cases, Blog, and Contacts. Contact information is provided as ico@flexe.io and @flexe_agency. The main content area features ten service cards, each with an icon, a description, and a 'READ MORE' button.

Service	Description
Airdrop	200k members
Databases	
ICODROPS	373 ICO/STO trackers
Social media content	
Followers / likes	500
400 ICO pools	
5300 crypto funds	
Telegram promotion	
Email marketing	
Retargeting	

4. Use of ICO PR Companies



The screenshot shows the Flexe.io website with a blue header. The logo 'Flexe.io' is on the left, with the tagline 'Full-stack ICO/STO/IEO marketing'. The navigation menu includes 'About', 'Bundles', 'Services / Prices', 'Clients', 'Cases', 'Blog', and 'Contacts'. On the right, there are contact options: 'ico@flexe.io' and '@flexe_agency'. The main content area is titled 'Telegram promotion' and lists services for group/channel members, pumps, and moderation.

Flexe.io
Full-stack ICO/STO/IEO marketing

About Bundles Services / Prices Clients Cases Blog Contacts

ico@flexe.io
@flexe_agency

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

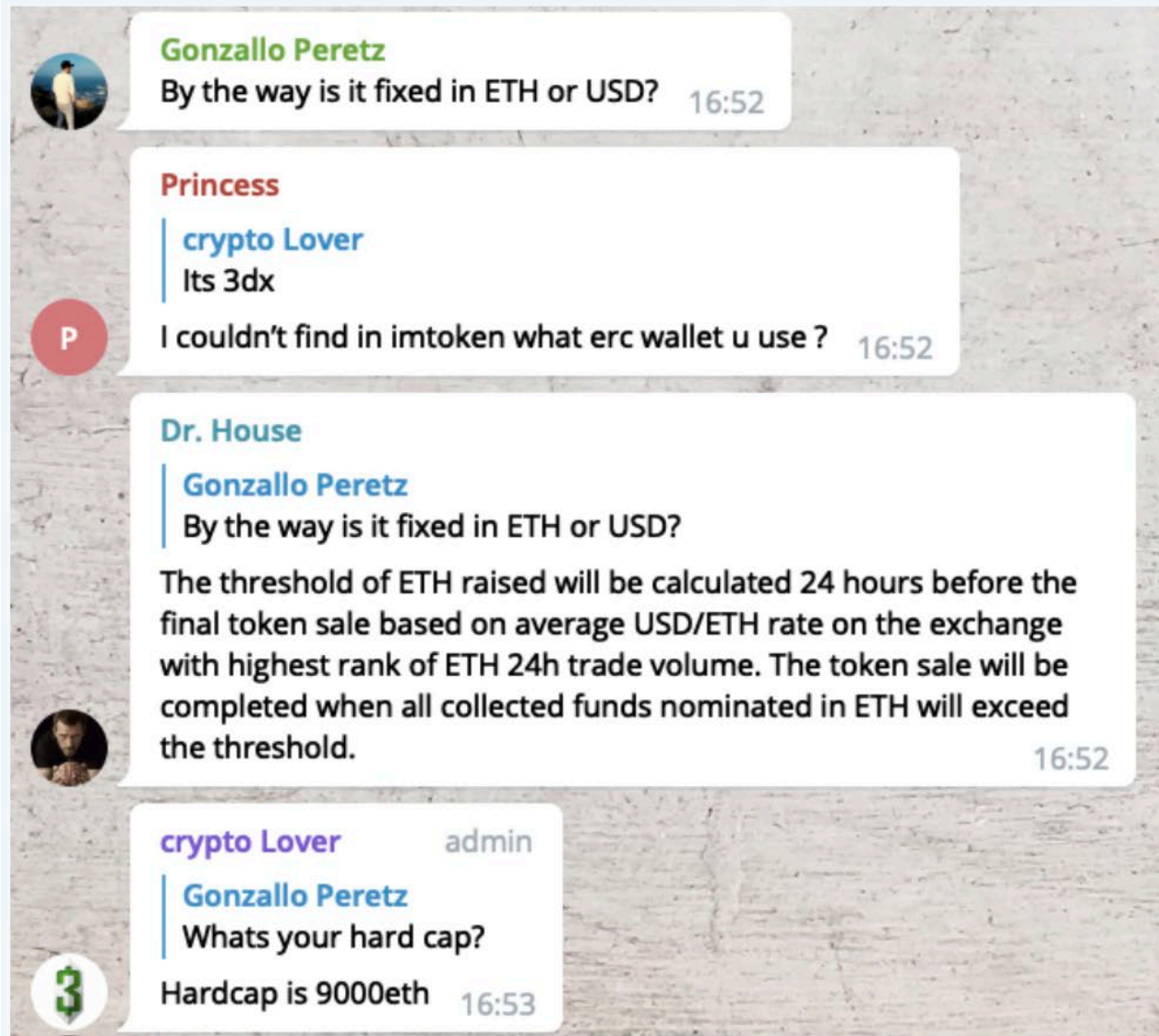
Telegram pump

- ✓ 1 day = FREE TRIAL 🔥
- ✓ 40 messages / daily = 190 EUR / weekly or 790 EUR / monthly
- ✓ 80 messages / daily = 360 EUR / weekly or 1500 EUR / monthly
- ✓ 160 messages / daily = 680 EUR / weekly or 2800 EUR / monthly
- ✓ 300 messages / daily = 1300 EUR / weekly or 5300 EUR / monthly

[Success case](#)

Telegram moderation

- ✓ 8 hours / daily = 950 EUR / monthly
- ✓ 24 / 7 = 1700 EUR / monthly



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.

Flexe.io last seen at 11:15 PM

Sure. I do not know how the telegram marketing works, so I was hoping you can explain the timing. 9:22 PM ✓✓

it depends on what your aims are 9:23 PM

some people come to us just to make number of people higher 9:23 PM

so that other people more likely join their chat 9:24 PM

in this case we recommend bots 9:24 PM

✓ 40 000 members = 1 200 EUR speed is 20k people per day 9:24 PM

and it is safe 9:24 PM

sometimes people want real users 9:24 PM

then we do inviting 9:24 PM

we take people from any chat our clients wants 9:25 PM

Flexe.io last seen at 11:15 PM

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 9:26 PM

Do people typically stop the pump after the ICO? 9:28 PM ✓✓

what do you mean by "stopping the pump"? 9:29 PM

I mean the subscription 9:29 PM ✓✓

6400 is for one time boost, or do the bots remain as subscribers to the telegram channel? 9:29 PM ✓✓

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 9:29 PM

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.