

INITIAL COIN OFFERINGS: A PARADIGM SHIFT IN SEED FUNDING

George P. Babu

Under-graduate (BBA 2nd Year), Loyola Academy, Old Alwal, Hyderabad, Telangana India
Email: immanuelholdings7@gmail.com

Abstract: Seed funding, early-stage investments particularly in start-ups, has seen a major paradigm shift in recent years, fuelled by the rise of blockchain technology coupled with the concept of crowdfunding and a neoteric amalgamation of equity ownership and digital currency. According to Coinschedule, in 2017 alone, there were 235 ICOs world over raising about \$3.7 billion with a huge proportion of them being early-stage investments effectively replacing early VC investments in start-ups. An initial coin offering (ICO) by definition is a hybrid of a crowdfunding program and an initial public offering (IPO) for raising capital via the sale or issue of tokens (equivalent to shares in a public company) for crypto-currencies/cash. ICOs have started dominating over seed investments because the flexibility they offer for start-ups is matchless. Due to the global upsurge in the prices of crypto-currencies, suddenly large tranches of capital are now at the disposal of crypto-investors. Moreover, ICOs offer to channelize this capital into the entrepreneurial workspace of budding new start-ups. This paper intends to study the revolutionizing impact of ICOs and the role they can play by helping ingenious entrepreneurs get access to these massive tranches of capital in the modern millennium, while concomitantly exploring future possibilities and challenges.

Key Words: Crypto-currencies, ICOs, IPOs, seed funding...

1. INTRODUCTION:

In mid-2013, Mastercoin, now known as ‘Omni’ launched history’s first initial coin offering via a token sale through a month-long fundraiser program that garnered around \$500,000 in Bitcoin that time. Omni’s idea was that as the platform was being developed, the tokens would soar in value and investors could sell them to realize gains. Sometimes, tokens via such ICOs would be converted to crypto-currency units when the funding goal was met. Thus, an ICO in its motive is similar to any early-stage investment or an IPO, but is centred on a crypto-currency and operated on a decentralized platform like the blockchain. Things changed forever when the Decentralized Autonomous Organization (DAO) became one of the largest crowdfunding campaigns in history. DAO raised over \$160 million via an Ether token sale or an Ethereum-based ICO. Token-holders or investors can be considered like shareholders in public companies. DAO is completely an investor-controlled venture capital fund and every decision made with regard to funding a new project is contingent on achieving a decentralised consensus, giving token-holders more power compared to shareholders in public companies. In 2017 Kik, a Canadian-based messenger app, that had already raised over \$100 million through VC investments decided to go against the trend by raising close to \$100 million through an ICO via a token sale. These tokens can be considered similar to equity in public companies. Why a messenger app like Kik chose an ICO route is astonishing! Kik aims to setup a decentralized platform that is not reliant on advertising or e-commerce activity for revenue streams. Developers would be remunerated via tokens based on user experience. [1] The tokens would soar in value, only if the app was doing well. Thereby, these tokens can be sold and gains can be realized.

The year 2017 has been a landmark year for ICOs with about \$3.7 billion raised, proximately a tenth of all PE-VC investments made this year and surpassing VC seed funding and angel investments. The crypto-financing wave has not really hit India though. In October, India saw its first ICO through Indicoins, a digital-currency-cum-social-service-campaign on the Ethereum blockchain that barely raised 900 ETH in its early-October presale. One reason for investor reluctance is that there are no effective regulations in place to safeguard investors. Nevertheless, other ICOs are in line to debut the markets and there is a growing investor sentiment for such fundraising options. Thus, this paper intends to study this paradigm shift in fundraising, especially seed funding, and concomitantly assess the flexibility they offer to new-gen start-ups.

2. OBJECTIVES:

- To explore ICOs as the future of fundraising and assess the likely drawbacks of conventional early-stage investment/fundraising options.
- To assess the flexibility offered to new-gen start-ups & opportunities for investors.
- To discuss regulatory frameworks concerning ICOs and norms for investor protection.
- To analyse the current ICO market situation and future trends & challenges.

3. METHODOLOGY:

Data sources collected for the purpose of this paper are secondary in nature such as white papers, reputed media sources and reliable web sources.

4. GLOBAL ICO BOOM: THE FUTURE OF SEED FUNDING:

The current global ICO boom is certainly an exaggeration of the contemporary crypto-currency bubble. However, what's astonishing is the pace at which it drew investor sentiment. ICOs may only have raised about 2% of the global IPO proceeds, but at the same time surged 40-fold y-o-y from 2016. In comparison with Bitcoin's rise, Bitcoin's price went about from \$1,000 to about \$15,000 last year. A 15-fold increase. ICOs clearly have out-performed this statistic. This surge in popularity has come under the lens of regulators world over. China and South Korea have already illegitimated ICOs stating concerns of illicit-activity financing. Despite that, experts predict 2018 to be a much brighter year for the global ICO revolution, mainly because ICOs may break-through the barriers of purely funding fin-tech start-ups and fund projects and start-ups where conventional finance was once in the lead.

In addition, in recent years there has been a less-noticed implosion in the early-stage VC activity worldwide. According to PitchBook, the no. of VC rounds in tech start-ups have nearly halved from a 2014 peak of 19,000 to 10,000 in 2017 worldwide. [2] In India, the number of start-ups in which early-VC/angel investments were made almost halved from 2016 to 2017. This effectively is signalling a capital drought for early-stage start-ups world over. Moreover, an increasing number of ICOs have catered to the capital demands of start-ups, though they have been quite remote. Nevertheless, ICOs have been associated with the blockchain technology, and every industry from healthcare to transportation is going to adopt this technology and start-ups are likely to take the lead. Thus, the future of seed funding, fund raising at large, is going to be determined by the global ICO revolution, whether the crypto-currency boom persists or not.

ICO Mechanism

The mechanism of an ICO can be elucidated in three stages:

- **Marketing stage:** The initial stage of a future project is the marketing stage where a white paper or an issuance policy concerning the outline of the project is circulated through various mediums that reach out to crypto-investors.
- **Offer-confirmation stage:** The final version of the white paper, after addressing concerns and risks raised by the investor community is released. This final paper contains the terms of contract, the risks and benefits involved for the investor's community, the status and issue of tokens and other relevant financial information that has to be disclosed regarding returns, rights of the investors... etc.
- **Offering stage:** The offer is made public with a sale date announced. The sale begins on the offering date and may span days, weeks or even months. Companies release tokens either after the entire capital is accumulated or by selling them on various exchanges. Once the offering stage concludes, the start-up commences its obligations.

Tokens can be considered to equity ownership in publicly trading companies. Often, ICOs issue tokens that give investors access to the features of the project, or more likely tokens that are like assets, which have value and can be sold to realize gains, rather than giving ownership of the company. This gives start-ups more operating flexibility over the long run.

Impediments with Conventional Early-stage Investment/Fundraising Options

ICOs are increasingly being preferred over conventional early-stage investment options such as VC-PE and angel investments because of the many impediments associated with such options. The following are the major impediments of such options:

- **Ownership:** VC-PE/ Angel investments require the founders to sell a stake in return for the capital being raised. ICOs have alternatives such as utility and asset-based tokens.
- **Illiquid stake:** Early-stage investors cannot have an easy exit and need to have long-term commitment for a venture, as they have to wait until the company goes public.
- **Valuation difficulties:** Since early-stage start-ups have no historical risk and return data, there can be certain valuation impediments that may undervalue or over value a firm.
- **De trop interference:** Venture capitalists often participate in the firm's activities, which at times may be helpful, but is also often considered as a 'de trop interference' or an unwanted interference by the founders as such actions may not align with their vision. The vice versa also persists. Differences thus can arise. This is mostly because VC-PE firms have a stake in the firm.
- **Growth/Performance pressure:** Most firms under the webs of VC-PE/Angel investors are certainly under the pressure to grow and perform. Though this may be good to a certain extent, the long-term consequences of induced pressure, when market situation is quite inappropriate for the start-up to thrive, can lead to its obliteration or acquisition.

- Post-IPO: Decision-making often becomes centralized in IPO companies. Whilst, in ICO companies decision-making is decentralized, giving investors an equal say.
- Limited funding opportunities: The funding opportunities with conventional fundraising methods are quite limited. Whilst, through ICOs start-ups can have a funding round at the inception of every project.

5. FLEXIBILITY & OPPORTUNITY: NEW-GEN START-UPS & INVESTORS:

Many new generation tech start-ups are being lured into the ever-expanding ICO boom because of the flexibility they seem to offer. In that purview, it would be appropriate to assess the various benefits associated with ICOs that render start-ups such flexibility and generate opportunities for investors.

Benefit Analysis: Start-up Viewpoint

- Capitalizing the power of blockchain & decentralization: The blockchain technology coupled with tokenized funding models (ICOs) has made a shift from centralized to decentralized architectures. Confirming contributions and distributing tokens can be done on the blockchain with lower efforts and lesser resources. Blockchains can operate and execute smart contracts that can manage such activities.
- Elimination of the ownership impediment: Start-ups that are unwilling to give away ownership of the firm can either issue utility or asset-based tokens than issuing equity.
- Post-ICO benefits: A start-up that has issued utility or asset-based tokens can extend benefits beyond the ICO with the elimination of de trop interferences from equity owners and reduced growth/performance pressure constraints from outsiders.
- Ease in fundraising: Fundraising is easier compared to conventional fundraising mechanisms with lower transaction costs involved and increased funding opportunities.
- Access to the global investor base and a larger fund pool: ICOs market offerings online, which makes it possible to reach out to more number of investors and garner larger funds compared to conventional options.
- Constructive network effects: An ICO for the purpose of a decentralized application project can create positive effects by automatically generating a large user base and sustaining the project. The tokenized funding model of an ICO helps users/investors stay invested in the success of such projects.
- Crypto-currency gains: Gains in crypto-currencies in the recent year has now made large tranches of capital available for start-ups willing to go for ICOs. These gains in themselves have been a part in the promotion of ICOs.

Benefit Analysis: Investor Viewpoint

- Global opportunities: Through ICOs, investors can invest from across the world. The era of the monopoly of a few pertinent financial and technological hubs is over.
- Liquid early-stage investments: Tokens issued via ICOs are liquid and can be traded on exchanges. Early-stage investors can exit by selling their tokens.
- Huge ROIs: This may be the trend for some time, at least until the crypto-bubble pops.
- Limited Supply-Demand: Regardless of the ongoing crypto-bubble, ICOs follow limited supply-demand principle. Thus, investors can set themselves behind well-to-do projects and make gains of them over the long term as their crypt-coins soar in value.
- Consumer advantage: Investors can use their tokens and also use the project platform or avail related services like consumers.
- Transparency: This is with regard to the use of funds. As it is on the blockchain, the project can be subjected to audit anytime.
- Hedging against potential economic shocks: ICOs will soar in value in times of economic turmoil, as they are contingent on the crypto-currency market.

For investors, no investment is free of risk or pitfalls. In that purview, it would also be appropriate to assess various risks associated with ICOs.

Risk Analysis: Investor Viewpoint

- Audit-related risks: Although ICO start-ups run on the blockchain and everything is transparent, there are no formal processes to audit the often-virtual organization.
- Project abandonment: ICOs are fast-paced; investors get in even before formal business processes have begun. Thus, investors have to accept the risk of project abandonment.
- Valuation hurdles: Valuation difficulties also persist with ICOs. Moreover, many investors buy these tokens in expectation of rising prices and not on the increase of the fundamental utility of the token.
- Bubbles & Ponzi Schemes: ICOs are a modern financial innovation that may be contrivances in hands of comen to perpetuate bubbles or Ponzi schemes.

- Market risk: ICOs can also be subject to extreme price volatilities, pumping and dumping activities and other market manipulations.
- Lack of KYC norms: ICOs may or may not comply with KYC norms, making them susceptible to activities associated with money laundering and terrorism. Moreover, it is difficult to track these pseudonymous tokens.
- Illicit-activity financing: Regulators and governments are in the fear that ICOs may finance illicit activities like terrorism. Thus, there can be regulatory crackdowns.

6. REGULATORY FRAMEWORKS: ICOS

Regulation, govt. policy and the legal stance adopted by the financial system concerning unconventional funding vehicles are the biggest hindrance for firms across the world to raise money through ICOs. ICOs on one side of the coin are systemic risks, but on the other are a modern financial innovation that can revolutionize seed funding. Thus, regulation should not crackdown on the beneficial side of ICOs, but shall insure regulators against their fears.

The following are some of the approaches/trends adopted by regulators to deal with ICOs: [3]

China & South Korea: Last year, both these countries issued a blanket ban over ICOs and trading exchanges by asking them to return to investors all the money raised.

Russia, USA, UK & Japan: Though Russia has made certain abrupt reversals of policy; it has now come up with earnest efforts to put forth clear legislation. While, USA & Japan have been issuing caveats against the risky nature of ICOs. USA has committed to dealing ICOs on an individual basis. UK has also adopted a similar stance. While Japan has recognized crypto-currencies as virtual currencies and has stated that ICOs falling under the equity-ownership model will be under the purview of Financial Instruments and Exchange act.

Hong Kong, Taiwan & Singapore: Hong Kong has a similar approach to Japan, considering crypt-investments with equity-ownerships as securities. Taiwan is also likely to follow-suit. While, Singapore is contending the fact whether they can be considered securities.

Canada & Switzerland: Canada has taken a sandbox regulatory approach, considering a few regulatory experiments in the field, inviting fin-techs with the promise of a free pass for the time being, while the regulator is developing policy. Switzerland has adopted a mix of the laissez-faire approach and the caveat-issuing approach hedging against consumer risks.

India: India has rather had a quiet policy stance concerning ICOs so far. ASSOCHAM has already called for tougher regulation or a blanket ban stating consumer/investor risks in the absence of a legal framework. SEBI is grappling with issue of considering tokens as securities. Like many countries, RBI does not discern crypto-currencies an equivalent for money.

Recommendations Concerning Enacting Regulations for ICOs

- Adopting a Sandbox approach: At this stage, ICO experiments are pertinent to develop laws and a synergy between regulators, investors, new technology and start-ups.
- Global regulatory alliances: These alliances are suggested to be formed to eliminate various money-laundering problems through ICOs and to decide on key issues such as investor and consumer protection, alongside reducing the burden for ICOs globally.
- Priority assessment: Govt.'s should assess priorities and set-up progressive norms on a fast track, such as quickly identifying areas where regulatory compliance is pertinent or setting standards for consumer/investor protection.
- Multi-system regulatory confluence: ICOs call for multi-system regulatory approach. Thus, a likely confluence between SEBI, RBI and other sectoral regulatory agencies is expected in India.
- Case-by-case approach: Following the example of USA and UK, a case-by-case approach or a more dynamic approach than an institutional approach is well suited for unconventional fundraising options such as ICOs.
- Temporary ban: In some cases of increased market volatility, a temporary ban is suggested until regulators can sort out the issue.
- Norms for consumer/investor protection: If consumer/investor protection is ensured, the stability of the financial system can be preserved.
- Straightaway considering equity-tokens as securities as they are more or less the same. This is a step towards securing the rights of investors.
- Regulators shall constantly monitor over ICO markets, as to precisely know when to step-in. That being said, they shall be in control of the system, but shall avoid the unnecessary exercise of control.
- Hiring inquiry commissions pertaining to experts to understand the broader technological implications of blockchain to frame better-encompassing regulations.

Prolonged Regulatory Uncertainty

There are potential ramifications for 'prolonged regulatory uncertainty' that often starts weighing on the project itself. For instance, in United States, issuers of ICOs are ill benefitted as close to 40% (effective tax rate) raised

through ICOs go to the govt.'s coffers, which wouldn't have happened in the case of PE-VC investments or an IPO stake sale. This is because regulators are not certain on considering tokens as securities, and thereby consider the token-sale as revenue generated from operations. Thus, this is a case for prolonged regulatory uncertainty and requires swift action. As over the long run, the advantages over costs through ICOs turn out to be disadvantages, once the whole process is screened through tax and regulatory jurisdictions of various countries. The potential ramifications have so far been consuming on the promises ICOs can deliver, making it more & more expensive for issuers to raise funds via ICOs than through conventional fundraising options.

7. CONCLUDING REMARKS: CURRENT MARKET SITUATION, FUTURE TRENDS & CHALLENGES:

ICOs for certain, have emerged as a hybrid of a crowd funding program and an initial public offering (IPO) for raising capital via the sale or issue of tokens for crypto-currencies/cash. The following standpoints aim at bringing into light the current market situation of the global ICO market.

- The biggest and most recent development in the ICO market has been the launch of 'Petromoneda', world's first issue of a crypto-currency via an ICO by the sovereign government of Venezuela. This has been considered as a move to dodge U.S. sanctions and work as a stable currency in replacement to the plummeting, inflationary Venezuelan Bolivar. It is an issue of 100 million Petros (short for Petromoneda) backed by an equal number of oil barrels. [4]
- Prolonged Regulatory Uncertainty is likely to continue in the prevailing market situation, though the recent G20 Finance Ministers meet has made July 2018 the deadline to take unified regulatory action.
- After a year (2017) of explosive growth for ICOs (over \$3.7Billion globally), the year 2018 is expected to be a year of significant correction and restructuring. This has already become evident through the recent decline in crypto-currency prices.
- Ethereum has become the largest platform for the development of decentralized applications and ICO launches, with almost no other competing alternative platforms.
- Almost half (46%) of last year's ICOs have already failed. [5] This is likely to affect the global ICOs market's credibility as an investing option.
- India-based blockchain start-ups have started venturing into overseas markets to raise money through ICOs. [6] Similar trends are being observed in countries such as China, South Korea where regulations are not ICO-friendly.
- ICO funds have also been coming up. Venture Crypto-Capitalists need to take guard and stabilize a market that has become increasingly susceptible to a growing number of individual failures. Crypto-Investors have started to realize that potential prospects for growth may not obviously transform to profits in business.

Crypto-capitalism has now started to unravel its potential applications and ICOs is just one of them that has incidentally turned out to be a better alternative compared to early-stage PE-VC investments for start-ups. In the light of the aforementioned, the following are some of the contemporary challenges and likely trends for the future of ICOs:

- ICOs may professionalize investor experience forever and soon become a predominant form of seed funding, making it possible for the democratic distribution of capital by allocating it to firms across the world.
- The crypto-bubble will certainly pop and windfall gains will turn out to be overnight losses. The ICO market will also plummet. However, investors who have realized potential business that are likely to survive on good business models will reignite it.
- ICOs have the potential to drive businesses that can harness the power of blockchain and benefit the masses.
- The culmination of 'prolonged regulatory uncertainty' by regulators taking a firm stance will cause a short-term slowdown and at the same time correct over-valuations. Nevertheless, the biggest challenge for regulators and world governments will be to break out of the jinx of policy paralysis concerning ICOs and crypto-currencies.
- Another challenge concerning regulation is structuring legislation that reduce risks and harbour innovation.
- The greater challenge will be for these first generation ICOs, who have to deliver performance on the terms they raised capital. The success of the whole funding mechanism is greatly reliant on them.
- Concerns over long-term performance of firms that have been heavily invested into will be a major concern for investors, once crypto-currency gains decline.
- PE-VC firms may start venturing into ICOs eventually; Softbank and other similar firms have already made a move in that direction.
- 'Interactive Coin Offering' protocols that facilitate token purchases at any market valuation (uncapped ICOs) for any kind of investor, for any fixed amount of currency, with the option to cancel/modify a purchase will be the future of the ICOs, stimulating a healthier investor environment. [7]

REFERENCES:

1. TechCrunch Staff. (September 2017). Kik raises nearly \$100M in highest profile ICO to date. TechCrunch. (URL: <https://techcrunch.com/2017/09/26/kik-ico-100-million/>)
2. TechCrunch Staff. (November 2017). There is an implosion of early-stage VC funding, and no one is talking about it. TechCrunch. (URL: <https://techcrunch.com/2017/11/30/theres-an-implosion-of-early-stage-vc-funding-and-no-ones-talking-about-it/>)
3. Cryptocurrencies and ICOs – A Rough Global Guide to Regulation. CCN. (URL: <https://www.ccn.com/cryptocurrencies-icos-rough-guide-regulation/>)
4. Coindesk Staff. (2018). Venezuelan Politician Blasts US Sanctions as Petro ICO Goes Public. Coindesk. (URL: <https://www.coindesk.com/venezuelan-politician-blasts-us-sanctions-as-petro-ico-goes-public/>)
5. Fortune Staff. (2018). Nearly Half of 2017's Cryptocurrency 'ICO' Projects Have Already Died. Fortune. (URL: <http://fortune.com/2018/02/25/cryptocurrency-ico-collapse/>)
6. Mint Staff. (2018). Blockchain start-ups in India shift to overseas markets to raise ICOs. Live Mint. (URL: <http://www.livemint.com/Companies/YDe9uNNxEVFj1sc7gLiJ6K/Blockchain-startups-in-India-shift-to-overseas-markets-to-ra.html>)
7. [White Paper] B, Vitalik. T, Jason. B, Christopher. (2017). Interactive Coin Offerings. GitHub.
8. TechCrunch Staff. (2017). The technology, benefits, risks and regulatory measures you need to know about ICOs now. TechCrunch. (URL: <https://techcrunch.com/2017/09/19/the-technology-benefits-risks-and-regulatory-measures-that-you-need-to-know-about-icos-now/>)
9. FX Empire Staff. (2017). What is an ICO and How Does it Work? FX Empire. (URL: <https://www.fxempire.com/education/article/ico-initial-coin-offering-work-418446>)
10. Coinschedule. (URL: <https://www.coinschedule.com/>)