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Initial Coin Offerings (ICOs)

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Initial Coin Offerings (ICOs) for SMEs

Introduction

Initial Coin Offerings (ICOs) consist of the creation of digital tokens by start-up companies (i.e. young micro-SMEs) and their distribution to investors in exchange for fiat currency or, in most cases, mainstream cryptocurrencies (Bitcoin or Ether). ICOs are enabled by the use of Distributed Ledger Technologies (DLTs), such as the Blockchain, which facilitate the exchange of value without the need for a trusted central authority or intermediary (e.g. government, bank) and allow for efficiency gains driven by such dis-intermediation. Tokens are cryptographically-secured and benefit from the inherent characteristics of DLTs on which they are built such as transparency, security and immutability of the ledger given its distributed nature.

The important role of SMEs in the real economy is well recognised and is derived from their contribution to employment, value added, innovation and general economic growth. Financing sources allow SMEs to fulfil their role, and it is therefore important for SMEs to have access to multiple financing sources both under normal market conditions and in periods of financial stress.

Raising money via an ICO is typically organised in three phases:

Phase I — whitepaper announcement
A company or project team releases its white paper, which includes critical information to share with the supporters or potential investors. The most important information includes the purpose and mission of the project, project milestones, timeline of the milestones, number of tokens issued and their price, expected amount of funding to be raised, timeline of the funding and an explanation of how the funding will be raised and then allocated to develop or expand the business.

Phase II — release of tokens
Tokens are typically, issued via a smart contract that is a piece of code that automatically implements some of the business logic described in the whitepapers. The code of the smart contract is typically made public. Investors can inspect the code and be assured that it reflects the conditions expressed in the white paper.

Phase III — token listed
Once the ICO is complete and the project kicks off, the tokens are listed on some cryptocurrency exchanges to be traded.

The importance of the ecosystem for ICOs

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ICO ecosystems

The ICO ecosystem is a complex environment extending beyond SMEs launching ICOs (issuers) and individuals or institutions wishing to participate in the ICO (investors or participants). It comprises digital exchange venues; trading platform operators; digital wallet providers; increasingly emerging financial and technical advisors; participants in regulated markets where tokens are underlying or referenced assets (e.g. derivatives, exchange-traded funds); investment funds or other collective schemes investing in tokens (e.g. hedge funds – reportedly heavily involved in the ICO market); custodians and regulators.

The ICO ecosystem is tech-heavy, and building a community plays an important role in their development given the open source nature of many of the platforms' protocol. Computer engineers, programmers and developers build the network infrastructure and develop the platforms' protocol (software) and applications that run on it. The entire community of developers and programmers can contribute to such projects given the open source nature of the protocol used in most cases.

Social media and specialised internet websites play a role in communicating the projects backed by ICOs and even marketing the issuance: platforms such as telegram, specialised sites such as Github, but also mainstream social media such as Twitter and Facebook participate in the promotion and marketing of ICOs.

The importance of the network in blockchain-based projects is such that some ICO issuers have resorted to **'airdrops'**, the free distribution of tokens issued through random allocation or based on specific criteria. Although such mechanisms enable the rapid creation of a network around the project, participants' incentives may not necessarily be appropriate for the platform to fulfil its potential (e.g. speculation).

Given the tech-heaviness the ecosystem and the technological requirements underpinning ICO mechanisms, an SME wishing to issue tokens needs to have a business rationale based on DLTs and the blockchain.

The importance of the ecosystem for ICOs

Airdrops

An airdrop involves the free distribution of native tokens by issuers to existing or new users of their platform, before or concomitantly with the ICO offering. It is an innovative way for a company to promote its product/service via active participants instead of traditional marketing via professional service providers.

The main purpose of airdrops is to kick-start the creation of a community of token-holders before or together with the ICO, or to boost the network effects of already created networks. Airdrops are used for marketing purposes; to raise awareness of a new token; drive more participants to the issuance; but also reward existing participants/token-holders for their loyalty, their active engagement in the network or for bulk purchases. As most airdrops involve tokens which are not already traded in secondary markets, the holders of such free tokens cannot exchange them and cash out.

Token-holders can benefit from the usage of the token (access to a service/product) or wait for the token to become liquid so as to trade it.

In many cases, tokens distributed in airdrops are distributed randomly through the use of smart contracts which send these free tokens to active wallets. In some cases, airdrops can raise financial consumer protection considerations, when used by scammers who trick users into disclosing their private wallet keys in order to receive free tokens. Anecdotal evidence suggests that airdrops may also be used as an alternative way to provide access to tokens in countries where ICOs are banned.

See more detail on:

Section 4.6 in *Guidance on Cryptoassets - Feedback and Final Guidance to CP 19/3*

“Tokenomics”: the economics of ICOs

“Tokenomics”: the economics of ICOs

Structuring of ICO offerings

The economics of ICO issuances, increasingly known as *tokenomics*, involve all decisions around the issuing and implementation of a token within an ICO ecosystem, and the way holders of tokens are able to use these to exchange goods and services on the platform. Such decisions include structuring of the offering, sale models, pricing of tokens and allocation mechanisms. Parallels have been drawn between central bank currency issuance and ICOs. Many industry participants refer to a "monetary policy" in token issuance, as issuers need to manage expectations of tokenholders and ensure price stability for the token.

In addition to fostering a more vibrant network, caps on individual contributions promote KYC/AML activities by issuers, as it effectively requires a KYC process to be undertaken by the issuer. In such cases, issuers verify that the address of each tokenholder represents a unique individual and can create whitelists with users’ addresses and verifications, similar to shareholder registries.

The case of Filecoin can be a good illustration of token allocation. Thirty per cent of the tokens created would be disbursed "at genesis": 15% to the development team, 10% to investors, and 5% to the “Filecoin Foundation” that will ensure the future development of the project. The 15% team allocation, together with the 5% to the Filecoin Foundation was considered by the industry as rather high. The remaining 70% of tokens would be reserved for mining rewards, and miners will be able to earn those tokens as reward for every block in exchange for replicating files on the network.

Pre-ICOs

Before the actual ICO, some issuers choose to undertake a private offering of tokens or token "pre-sale" to a small number of identified parties, in most cases insiders or cornerstone investors such as VC funds. Tokens in such pre-sales enjoy a discounted price for the tokens and in most cases proceeds raised are used to cover the set-up and expenses of undertaking the ICO transaction (marketing expenses, advisory fees, etc.).

“Tokenomics”: the economics of ICOs

Token valuation and pricing

The application of standard corporate finance valuation frameworks to tokens issued in ICOs is challenging. Most ICO offerings do not fit the standard investment paradigm given the underlying economic relationships involved in such offerings, as well as the novelty and complexity of the structures used.

The difficulty valuing ICO tokens is very much linked to the difficulty in defining tokens. If tokens were to be defined as currency, their valuation could be somehow similar to cash or cash alternatives; if defined based on their utility value, they would represent the price of the service at any point in time; if considered equity securities, the company's enterprise value would need to be modelled and the price of the security derived from such model.

The economics of the issuance (number of tokens, offering price, structure of the token offering) need to be defined and disclosed to potential participants upfront, to allow for the valuation of the tokens, however, this is not always assured given the absence of disclosure requirements in most ICOs.

The full schedule of tokens to be issued at the initial and future stages need to be known with accuracy for an investor to be able to make an informed decision about the value of the token, as existing tokenholders are diluted by subsequent issuances (what is defined as “token inflation”).

Pre-defining the token schedule of issuance may reduce the flexibility of an SME to quickly respond to changing market conditions, reducing the agility of the company. Entrepreneurs themselves are faced with the challenging task of having to decide, with accuracy, their total financing needs that their venture will face in the future, so as to determine the total supply of tokens, before the platform is even built – or impose a dilution for their initial tokenholders at a later stage.

Another level of difficulty in valuation and pricing relates to the way value is (i) created and (ii) shared within the network. As mentioned above, network effects represent an important value creator for blockchain-enabled projects, and the expected monetised value of such positive externalities needs to be accounted for in valuation.

Secondary markets and token-holder returns

Trading of tokens in secondary markets is neither automatic nor guaranteed after the issuance of tokens in an ICO. The listing and active trading of a token in a crypto-exchange or crypto-trading platform is actually considered as a proxy for the success of the IPO. Listing in multiple exchanges is thought by the market to be a good benchmark for the strength of the token, acting as a signal for investor interest. This also pushes some ICO issuers to pay to have their tokens listed on a crypto-exchange with healthy liquidity, which in turn increases the costs of ICOs.

The price of tokens traded on secondary markets is freely determined by the supply and demand forces of the market, and in theory tokens should be trading close to their fair value.

Such returns could be attributed to high risk-return characteristics of ICOs which carry important uncertainty (business, regulatory, etc.); or could be an indication of a bubble.

The importance of secondary trading means that launching an ICO and issuing a token is not sufficient: SMEs need to be able to sustain tokens in the market by ensuring investors are interested in buying them in the post-offering market. This is challenging when some token-holders are driven by the hype and/or speculative purposes. When tokens are used to provide access to products/services on the platform (utility tokens), secondary trading may lead to the entrepreneur losing control over the pricing of his product/service.

In a theoretical model, where the exchange rate of ICO tokens remains stable (price stability), the tokens that the SME is receiving in payment for its services reflect the customers' willingness to pay and reveals consumer value. However, the price of a token traded in the market is driven by multiple forces, including speculation. Issuing tokens can therefore prevent the entrepreneur from exercising an independent pricing strategy for his product/service.

The costs of an ICO offering

The low cost of issuance, that is driven by efficiency savings of blockchain-based solutions, is considered to be one of the most important benefits of financing through an ICO. The only costs involved in early token-sales were technical costs of setting up the infrastructure and developing the protocol, plus exchange platform fees for the conversion of tokens, as advisors were rarely involved then.

While the cost benefits were intuitive in the first generation of ICO offerings, which effectively benefited from regulatory uncertainty, regulatory gaps or even regulatory arbitrage, this is becoming less the case as ICOs mature and move away from unregulated territory. The evolution of costs related to an ICO issuance follows the evolution of financing mechanisms, and today involves advisory fees (legal, financial, security), heavy marketing expenses, listing fees and other post-ICO costs such as community management services.

Anecdotal evidence suggests that even today, ICOs are a cheaper way to raise funds when compared to IPOs: according to some market participants, ICO costs about 3% of total funds raised for offerings of about USD 1 million, compared to 3–5% equivalent rate for an IPO. More importantly, IPOs involve additional fees of c.7% paid as compensation to underwriters (investment banks) who effectively guarantee the equity offering.

The breakdown of ICO costs therefore varies between offerings, depending on the underlying technology, the jurisdiction, its size and other structuring characteristics. The main components of such costs are similar across the board and include **technical costs**, **legal fees**, other **advisory fees**, **marketing costs** and **listing fees**.

“Tokenomics”: the economics of ICOs

Illustrative example of an ICO offering: Filecoin

Filecoin is a decentralized storage network built on the blockchain with a native protocol token called “Filecoin”. In theory, the more participants enter the network, the more users benefit as there is more potential storage capacity and demand for storage (network effects).

Conceptually, tokenholders can use the Filecoin to pay for storage or distribution of data, while Filecoin miners earn Filecoins for providing storage to clients. Unlike Bitcoin, where mining is used to validate transactions and maintain blockchain consensus, miners in Filecoin also provide storage directly to clients and Filecoin’s mining power is proportional to active storage space (similar concept to proof-of-stake).

The Filecoin ICO was one of the largest ICOs to date. The company raised USD 52 million in a pre-sale to select strategic advisors. The ICO offering was completed on 7 September 2017, raising over USD 205 million in USD, ETH, BTC, and ZEC, from over 2,100 investors in over 50 countries.

Investors received Simple Agreement for Future Tokens (SAFTs) that gave holders the right to receive Filecoin tokens at the network launch. Investors would need to create a Filecoin wallet to which tokens will be sent when the network launches. The offering complied with legal requirements of KYC/AML checks and accreditation requirements (access to accredited investors only, based on US standards).

The Filecoin ICO was capped at 200 million Filecoins. Advisors bought in at USD 0.75 per Filecoin SAFT, while the offering price for remaining investors was scaling and increasing for every USD 40 million raised according to a pre-defined function. **The price of the Filecoin token will effectively represent the price of storage in the network once the network is operational, but the demand for tokens did not necessarily reflect the demand for storage in the network.** Given that the exchange price of tokens can increase indefinitely, the real cost of using the storage service can theoretically end up at any price.

ICOs vs. traditional financing channels

ICOs vs. traditional financing channels

ICO vs. IPO

We briefly compare ICOs with conventional financing mechanisms catering for financing needs of similar characteristics, i.e. risk capital for seed and early stage financing. IPOs are commonly seen as similar to ICOs, perhaps due to the similarities in the terminology used in ICOs. Both constitute public offering of instruments that have rights attached to them and are used as ways to raise financing for the issuing company. But the similarities of the two mechanisms are limited to terminology and the mechanisms differ at most levels.

IPOs cater to established companies with a mature business proposition, a proven operating business and healthy cash flow generation, while ICOs are undertaken by start-ups that may not even be incorporated and do not have established operations yet. In addition, the duality in the function of many of the tokens issued, representing participation in the project and also having a usage/utility value, is unique to ICOs.

ICOs are in their majority project-based and the financing raised is actually allowing the start-up to finance the undertaking of a specific project, compared against IPOs where the financing is company-based. In addition, the vast majority of ICO offerings have financed blockchain-based companies with products or services created and delivered on the blockchain, whereas IPOs are industry agnostic. From the investor perspective, the investment in IPOs is based on a track record of both operational and financial performance. In ICOs, the investment is made on the basis of a proposed technological concept for a blockchain-enabled solution to a need.

ICOs vs. traditional financing channels

ICO vs. IPO

	IPO	ICO
Type of financing	✓ Risk capital ✓ After series D/potential VC exit	✓ Risk capital ✓ Early stage financing
Type of SME	✓ Business-based ✓ Mature business proposition ✓ Operating and financial track record ✓ All industries	✓ Project-based ✓ Concept-stage ✓ No operations, no financial track record ✓ Blockchain-enabled products
Regulatory oversight	✓ Regulated offerings ✓ Extensive requirements around registration, marketing of offering, disclosure	✓ Unclear regulatory framework
Size, cost, speed of execution	✓ Larger offerings (~ USD95m) ✓ Costs 3 - 7% of funds raised ✓ Several months for preparation and execution	✓ Smaller offerings (~ USD9m) ✓ Costs ~3% of funds raised ✓ Seamless and speedy execution (2-4 months)

Rights assigned	✓ Ownership rights ✓ Dividends ✓ Governance rights	✓ Dual function of tokens possible ✓ Participation/voting/other rights and usage/utility value
Investor pool	✓ Sometimes restricted to accredited/ institutional investors	✓ Unlimited – open to any and all investors
Valuation & Structuring	✓ Valuation based on financials ✓ Lock-up periods ✓ Trading is somehow managed	✓ Challenging valuation/ pricing ✓ Absence of lock-up periods ✓ Volatility is extreme
Disclosure obligations & transparency	✓ Prospectus and/or registration and other documentation ✓ Regular reporting requirement post-offering	✓ No disclosure requirements for unregulated offerings before or after the offering
Trading in secondary markets	✓ Regulated markets ✓ Fixed trading sessions ✓ Margin requirements for counterparty risk ✓ Market rules for trading	✓ Not always regulated trading ✓ 24/7 trading ✓ High counterparty risks ✓ Extreme volatility

ICOs vs. traditional financing channels

ICO vs. Crowdfunding

ICOs have been described by market participants as "crowdfunding on the blockchain". Indeed, ICOs with tokens used as a means of exchange for the future use of a product/service that is yet to be developed are similar to reward-based crowdfunding, as in both cases the companies pre-sell a product or service that remains to be built. Reward-based crowdfunding offers non-pecuniary tangible (e.g., product) or intangible (e.g., reputation, identity) rewards in exchange for funding.

Comparing equity-based crowdfunding to ICO offerings is less straight-forward, given that the majority of ICOs do not confer equity ownership or participation in future revenue streams of the issuing company. While the decision of investors to invest in equity crowdfunding is purely driven by financial return motivations, investors pledging funds for rewards-based crowdfunding can have non-financial motives such as an interest in receiving rewards, their willingness to support ideas or be a part of a community.

Both financing mechanisms are based on technology and online payment systems to facilitate transactions, and both are suitable for seed and early-stage financing of start-ups. In the case of crowdfunding, products or services tend to be in a more advanced stage of development, with at least a prototype in place when the campaign is launched, compared against ICOs which are mostly at concept level at the time of the offering.

In addition to raising funds, both financing mechanisms aim to incentivise early product adoption and the formation of a community around their project. It can be safely assumed that, given the nature of distributed ledger technologies, network effects of ICOs are more important than the ones present in crowdfunding campaigns.

Unlike crowdfunding, where an online crowdfunding platform is required for the campaign to be launched, ICOs do not rely on an intermediary. Intermediaries are replaced by the blockchain, removing the corresponding costs of intermediation and benefitting from efficiencies generated by the use of DLTs.

ICOs vs. traditional financing channels

ICO vs. Crowdfunding

At the same time, other costs involved in ICOs, such as listing costs, are non-existent in crowdfunding. Although both structures involve small ticket investments, the ultimate size of fundraising tends to be larger in ICOs, and thus any cost comparison between the two financing mechanisms may be misleading given the difference in their respective funding sizes.

Another important difference lies in the pricing of the products. A company launching a crowdfunding campaign allowing for the pre-purchase of its product has to define in advance the price of the product. In ICOs, there is no price commitment as to the price of its future services.

Another important parameter in that crowdfunding platforms have vested interest to select credible projects for the campaigns they list, given the reputational risk involved for the platform. The only reputational risk involved in ICOs is the one of entrepreneurs themselves as no vetting by an independent agent with aligned interests is performed.

The vested interest of the crowdfunding platform has implications in the disclosure of offerings. In the event of an ICO offering without specific disclosure requirements, the ICO whitepaper contents may be published without any prior due diligence or validation by a third party. On the other hand, the vested interest of the crowdfunding platform to ensure its credibility implies a minimum control in the contents of crowdfunding disclosure to ensure the quality of documentation.

Importantly, both crowdfunding and ICO offerings reach a much wider investor base, allowing retail investors to participate in the financing of SMEs and start-ups. In the current form of ICOs and particularly when the offering is not regulated, there is no restriction in the profile of the potential investor. In the case of crowdfunding, and depending on the jurisdiction, restrictions may apply on the pool of potential investors. In the US, the statutory “accredited investor” definition takes into account financial status under net worth/net income tests or educational/professional expertise, as verified by certain regulatory authorities.

ICOs for SMEs

Benefits of ICOs for SMEs

Benefits of ICOs for SMEs

From a business strategy perspective, ICOs can allow the entrepreneur to generate buyer competition which reveals consumer value without the need to know ex ante the willingness of consumers to pay for the product/service.

ICOs are faster to implement when compared to other public offerings, at least in the current state of the cryptocurrency market. The examples of Bancor (USD 150 million raised in 3 hours) or BAT (USD 34 million raised in less than a minute) are prominent examples of the speed of execution for the raising of financing, and the pre-ICO phase is similarly shorter compared to other financing instruments. **The cost and speed of execution are also linked to lower regulatory requirements applying to some ICOs.** Depending on the jurisdiction, the lack of registration and disclosure requirements, or due diligence before the issuance increase the speed of execution, while the absence of required disclosure post-issuance reduces costs. Such benefits can be overridden by reduced transparency and related risks carried by subscribers to token offerings.

From a technical perspective, tokens issued in ICOs are cryptographically secured and, given that they are based on the blockchain, benefit from characteristics of DLTs, such as immutability, permanence, transparency and security. The use of smart contracts may reduce counterparty risk as the programming of such applications guarantees the automatic execution of a transaction upon triggering of pre-defined conditions.

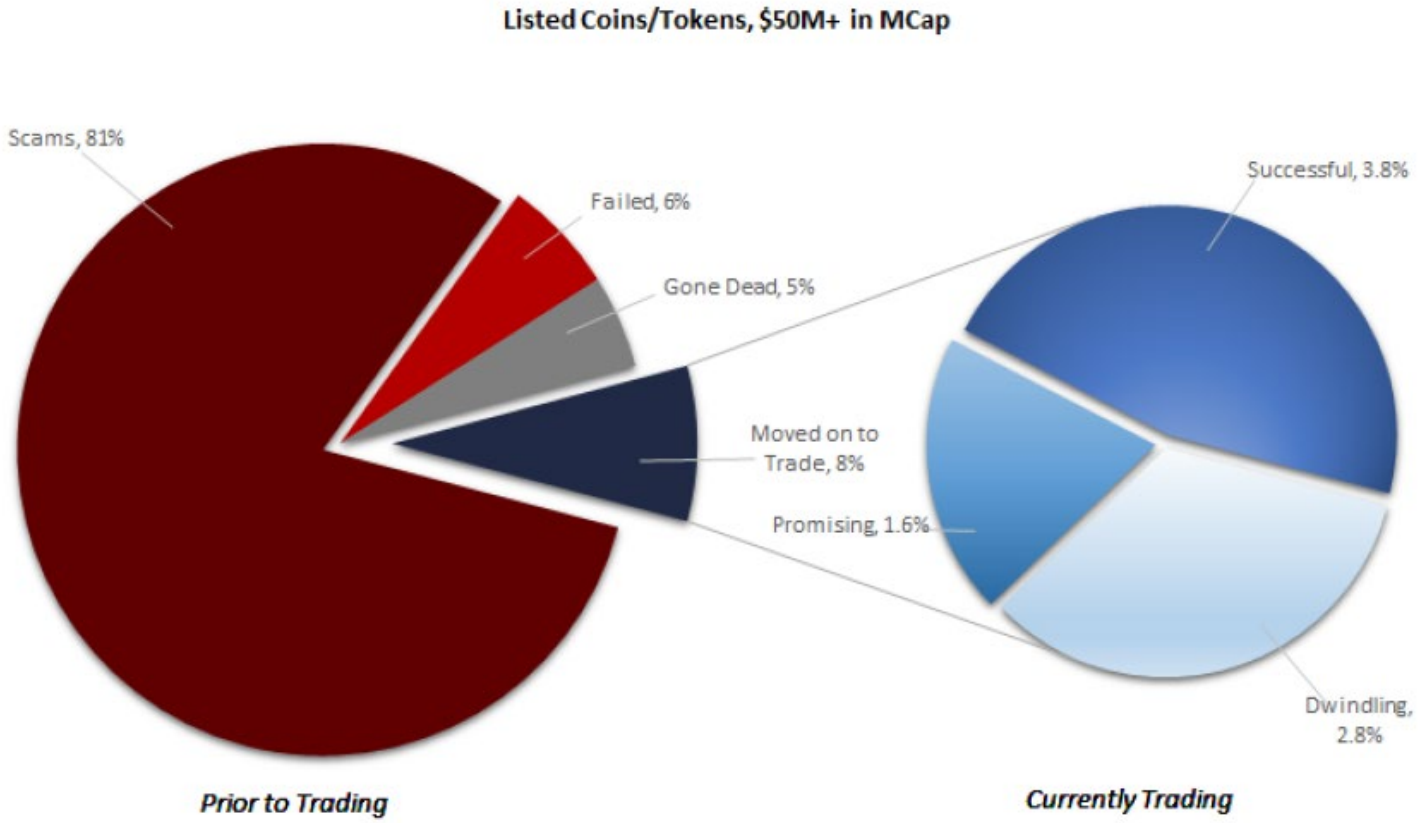
ICOs have the potential to create economic value that goes beyond the value of the company and the product/service that is developed on the back of funds raised. Unlike the internet, where most of the value was captured at the application layer, value in blockchain-based companies is captured also at the protocol level (“fat” protocol layer) on top of which digital applications can continue to be deployed. Blockchain-based models have the ability to continue to attract and deploy projects on the platform, create value at the protocol level and incentivise the creation of additional applications at the application layer.

Limitations of ICOs for SMEs

LEGAL AND REGULATORY UNCERTAINTY	Regulatory framework applying to ICOs	• Absence of clear regulatory framework applying to an ICO offering, depending on the jurisdiction; • Unclear legal rights and obligations of token issuers and tokenholders, depending on the jurisdiction; • Low understanding among the investor community of potential legal and regulatory requirements of token issuances.
	Regulation of underlying technologies	• Lack of clarity around the regulatory framework applying to the underlying distributed ledger technology; • Issues around the use of smart contracts in DLTs (legal enforceability, recourse).
	Cross-border regulatory arbitrage	• Risk of regulatory arbitrage to the extent that regulatory action is not somehow coordinated; • Issues around the cross-border marketing and issuance/ purchase of tokens.
STRUCTURING-RELATED ISSUES	Valuation & pricing	• The application of standard corporate finance valuation frameworks to tokens issued in ICOs is challenging; • ICO offerings do not fit the standard investment paradigm (e.g. duality in token function; evaluation of network effects; sharing of value created in the network).
	Token economics	• Challenging to pre-define SME financing needs before project is launched in order to avoid tokenholder dilution in the future; • Dichotomy in value attribution between tokenholders and traditional equityholders in case of follow-on financing round.
	Conflicts of interest	• Lack of "skin-in-the-game" when founders carry no personal financial risk in the transaction; • Allocation of tokens to founders without lock-up periods leads to misalignment of interests; • Time mismatch between entrepreneurs/ developers' rewards and tokenholders' interests; • Increased volatility of token price, partly driven by speculation (e.g. flipping) increases the inability to exercise an independent pricing strategy for the product/service

INVESTOR PROTECTION	Asymmetries of information & disclosure	• Lack of transparency in the absence of disclosure requirements pre and post-ICO exacerbate information asymmetries.
	Investor suitability & skills	• ICOs are high-risk, highly volatile and speculative investments and may not be suitable for most retail investors; • In addition to financial literacy skills required, retail investors need to have basic technical knowledge around DLTs (e.g. loss of private key resulting in complete loss of investment).
	Investor rights (redress, bankruptcy)	• Investor rights to obtain redress and compensation may be unclear and potentially limited due to the legal uncertainty; • Limited private law liability in the absence of issuer details; • Coverage and ranking in case of bankruptcy is unclear.
	Market integrity	• Very high risk of fraud; • Risks extend beyond issuance into the wider crypto-asset secondary markets; • Trading platforms for tokens and crypto-exchanges for conversion of tokens to fiat lack normal disciplines in protecting investor assets
CORPORATE GOVERNANCE AND REGULATORY COMPLIANCE	Governance structure	• Challenges of decentralised governance for SMEs issuing tokens; • The lack of formal governance structures at issuer level and/or at network level creates is an extra source of risk for investors.
	KYC / AML	• Know Your Customer (KYC) and Anti-Money Laundering (AML) checks on ICO offerings may be inadequate.
	Data protection and privacy	• Data privacy and identity protection may be contrary to the inherent public nature of some DLTs. • The "right to be forgotten", provided in some jurisdictions, may be difficult to be applied in immutable databases such as the blockchain.
OPERATIONALAND BUISNESS RISKS	Difficulty in getting banked	• Anecdotal evidence suggests difficulties for ICOs issuers in getting formal banking services.
	Technical skills requirements	• Technical skillset required for both SMEs and tokenholders to maintain a network based on DLTs.
	Operational and inter-operability risks	• Operational risks of DLT-based applications (such as scaling, network stability, coding errors, uncertainty of settlement finality); • Concerns about interoperability of different DLT-based systems and networks among each other and relative to legacy infrastructure and systems.
	Cyber-risk	• Token issuance and trading is exposed to cyber attacks (recorded incidents of hacking, cyber-attacks to wallets or exchanges), exposing SMEs and investors to losses and reducing the credibility of ICOs.

Limitations of ICOs for SMEs



The risk of fraud is high in ICOs, although the data on offerings reported as scams varies. Estimates of frauds range between 5% to 25% of ICO offerings and up to a stunning 81%, depending on the classification used. Examples of fraud cases include Pincoin, iFan, OneCoin Ponzi scheme, Bitconnect referral system, Plexcoin and Centratech, to name just a few. SEC set up a fake ICO, called HoweCoins, to educate investors about how to avoid scams.

Policy and regulatory considerations

ICOs offer an innovative way to raise capital for young and innovative SMEs enabled by DLTs and the blockchain. Under specific caveats, regulated forms of ICOs have the potential to become an alternative financing mechanism for young SMEs with DLT-related projects, which could improve competition in the SME financing space. ICOs could facilitate faster financing of SMEs at a lower cost compared to most traditional financing mechanisms, benefiting from cost efficiencies derived from automation and disintermediation through the use of DLTs and the blockchain.

Depending on the conditions of issuance, ICOs are changing capital formation and inclusive financing in ways that we have not seen before. ICOs can be a more inclusive financing vehicle by allowing small retail investors to participate in the financing of small businesses and start-ups. ICOs can provide SMEs with direct access to an unlimited investor pool, offering near-immediate liquidity and the potential to create economic value that goes beyond the value of the company through the creation and monetisation of network effects.

Depending on the structure, SME founders can raise early stage funding without giving away ownership, therefore addressing a major impediment to IPOs. Despite this powerful potential, in the current stage and in their current form, uncertainty in the applicable regulatory framework for ICOs and crypto-asset markets, coupled with limitations in the structuring of ICOs and operational risks related to DLT-based networks, **there are significant risks for investors participating in ICOs**, while at the same time exposing SMEs to risks. Clarity in the regulatory and supervisory framework applying to ICOs is arguably a stepping stone to the safer use of token issuance for financing purposes. Standardised disclosure requirements are indispensable so as to overcome information asymmetries that are already present in the financing of SME risk. Enhanced investor protection for retail investors, coupled with efforts for the financial education of retail investors, can safeguard their informed participation in such financing. AML/CFT requirements on all ICO issuances are equally important, especially given the wide range of relevant issues observed in the crypto-assets space.

Policy and regulatory considerations

AML/CFT (**Combating the Financing of Terrorism**) requirements on all ICO issuances are equally important, especially given the wide range of relevant issues observed in the crypto-assets space.

The pitfalls from the design and structure of ICOs, and issues related to authentication, disclosure, governance and misalignment of interests between founders and investors could be addressed as the financing mechanism matures. As market confidence in the underlying DLT technology grows, the potential to create a safer environment for such activity in the future is strong. In addition to regulation, best practices that are increasingly driven by the industry could also support a robust and safe ICO market.

When ICOs mature and develop, they have the potential to complement traditional bank and market-based lending, facilitating a better distribution of risk amongst market participants.

A delicate balance will need to be achieved in the development or application of regulatory and supervisory requirements that will not deprive the ICO mechanism of its speed and cost benefits, particularly when it comes to smaller size offerings. Proportional application of regulatory requirements, as is the case in small public equity offerings in certain jurisdictions, could be considered as the way forward.

Given the global nature of ICOs issuing and trading across borders, cooperation at the international level would warrant a coordinated approach that will prevent regulatory arbitrage and allow ICOs to deliver their potential for the financing of blockchain-based SMEs, while also protecting investors.

References to read

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[3] Allen, J.G., Rauchs, M., Blandin, A. and Bear, K., 2020. Legal and Regulatory Considerations for Digital Assets.