

### 3. Initial Coin Offerings (ICOs)

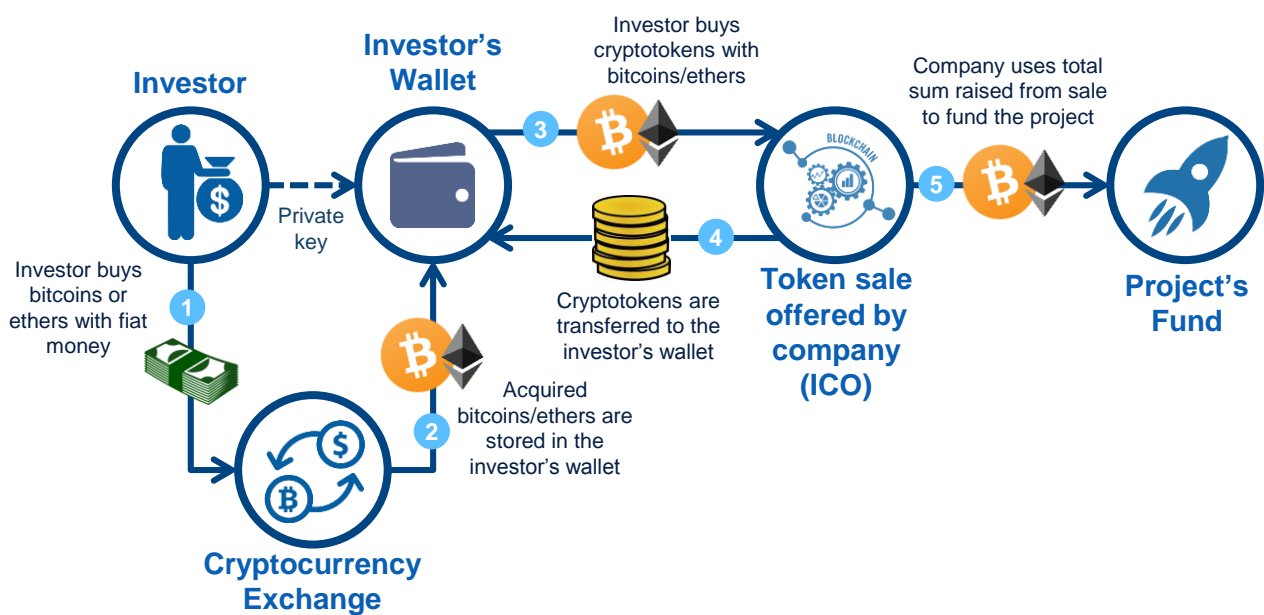
#### Investment in crypto tokens: fad, madness or vision?

Crypto tokens issued through ICOs have gone from being below the radar at the end of 2016 to becoming the asset class with the fastest growth rate in investment volume in the history of the financial markets. However, investors must be aware of the high level of risk and the lack of specific regulation.

#### What ICOs are

An ICO is a funding method for new blockchain startups based on the sale to investors of a percentage of proprietary cryptographic tokens issued by the company usually in exchange for another cryptocurrency, such as ether or bitcoin. After the offering period ends, the company is supposed to utilize the funds from the ICO to further develop its project.

Figure 3.1 Basic mechanism of an ICO



Source: BBVA Research

It has become in less than a year the preferred funding method for these companies, over the traditional alternatives offered by venture capital, banks or financial markets. For blockchain startups and projects it is an easy method of raising capital without the existence of intermediaries and mediators. Also, ICOs have allowed independent investors to participate in early-stage funding rounds of projects.

The issued tokens can be of different types and provide investors with different returns on investment. Most tokens are needed in order to use the product or service that the company is trying to develop, but do not give any sort of right of ownership or participation in future profits of the company. These are called **'utility tokens'** and the logic

behind the investment is that if the product or service is successful in the future, the value of the token will rise because of the need to use it to have access to the service. Another type of token gives ownership rights to investors in the company, so they are called '**security tokens**'. Finally, there are tokens used as mere currencies or assets (often called '**currency tokens**'), and investors buy them with purely speculative objectives based on price fluctuations.

Ethereum is the leading blockchain platform for ICOs, with more than 56% market share<sup>1</sup>. Unfortunately, ICOs over the Ethereum network have resulted in much phishing and many Ponzi schemes and other scams, accounting for about 10% of total ICOs<sup>2</sup>.

## How ICOs are operated

Usually, an ICO starts when a group of technologists decide to work on a project. They author a white paper that explains the technical and business dimensions of a project. Best practices include explaining how the technology works, the role of the token and its source of value, and mechanisms for issuing tokens and accessing raised funds, increasingly supported by independent audits.

Before an ICO actually takes place, there may be a pre-ICO or pre-sale. The goal of the pre-ICO period is to collect as much money from 'whales'<sup>3</sup> as possible. That money is typically added into the ICO or token generation contract, it acts as validation for smaller fish that "big money" is backing the project and can lead to "FOMO" (fear of missing out), which leads to an ICO hitting its cap. The very first ICOs did not have any sort of minimums or caps. ICO promoters quickly realized that by putting in what is called a "hard cap" they could drive group psychology through artificial scarcity.

Initially "whales" were mainly miners or early investors that had accumulated large amounts of cryptocurrency. Now anyone can become a "whale" by buying significant amounts of bitcoins (or ether) in the market. As their identity is unknown, it is possible that they are actually the usual venture capital or institutional investors, but this information is not disclosed.

Pioneer ICOs like Ethereum offered a bonus for early participation, which was accessible to anyone. However, early in the development of ICOs 'whales' started to demand hidden bonuses for dropping large amounts into an ICO. It is normal now for a pre-ICO (or private sale) to offer a higher discount or bonus to those willing to take the risk of giving money to an immature project.

Tokens are sold to a global crowd whose main commonality is technological literacy; there is generally no requirement to be an accredited investor or live in a particular country or region. In order to participate in an ICO the individual investor usually has to 'subscribe' during the pre-ICO period, indicating the desired number of tokens and sending the

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1: '*ICO Market Research: The Leading Blockchain Platforms of 2017*'. ICO Watchlist.

2: '*Exploits, Hacks, Phishing, Ponzi Are on the Rise on Ethereum*'. The Cointelegraph.

3: individuals or groups who hold vast quantities of bitcoins.

equivalent value in bitcoins or ether to an Ethereum address provided by the issuing company. When the ICO date arrives, a smart contract distributes the issued tokens to all the addresses from which the payments were received.

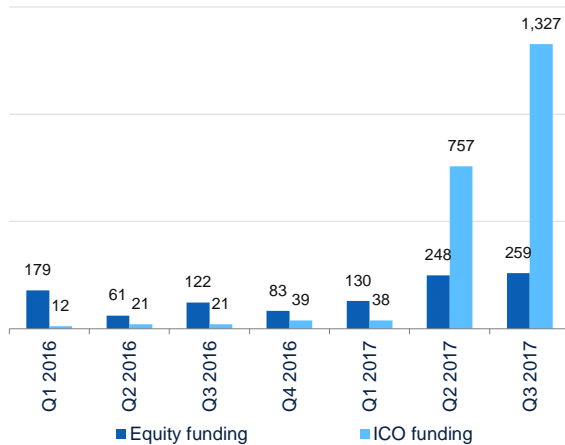
Some time after a successful issuance, the new token usually starts to list on various crypto exchanges, where a whole secondary market for crypto tokens has arisen.

## ICOs compared to other funding mechanisms

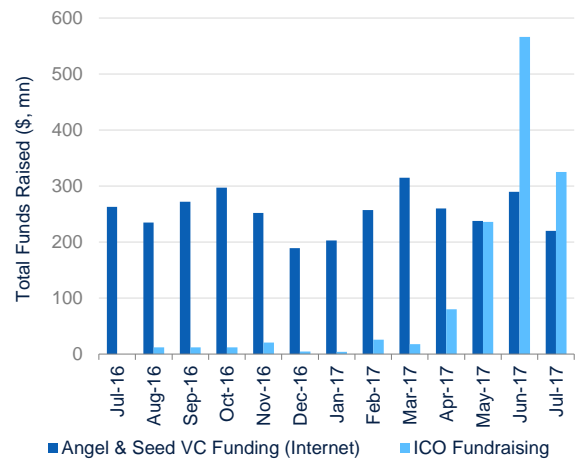
ICOs present differences with respect to other sources of corporate funding at companies' different stages, like Venture Capital or IPOs, the most important ones being that: a) they are purely peer-to-peer funding schemes, and b) they are mostly still unregulated. In any case, ICOs have been the preferred funding method for blockchain start-ups for the past year.

**Figure 3.2** ICO Funding evolution

Conventional Equity Funding To Blockchain Firms Vs. ICO Funding (Global, Millions (\$), Q12016-Q32017)



Angel & Seed VC Funding to startups vs. ICO Funding (Total Funds Raised by month (\$ Millions))



Note: ICO fundraising as of July 18<sup>th</sup>, 2017, per Coin Schedule. Angel & Seed VC funding data as of July 31<sup>st</sup>, 2017 and does not include "crowdfunding" rounds. Source: CB Insights, CoinSchedule, Goldman Sachs Global Investment Research

As we can see, ICOs were marginal compared to VCs for blockchain firms until Q2 2017, when the ICO craze started, and ICO funding is now five times the amount of conventional equity funding. Overall, ICO funding has also surpassed global early-stage funding (Angel and Seed VC) for start-ups since June 2017.

## Regulation of ICOs

In the last six months, the volume of ICO investment and the lack of investor protection have pushed regulators all over the world to react in different ways, ranging from the total banning of ICOs to the issuing of warnings and/or guidelines for issuers and investors, and even to the development of specific regulation.

In July 2017 the [U.S. Securities and Exchange Commission \(SEC\)](#) indicated that it could have the authority to apply federal securities law to ICOs. The SEC stated that most tokens are equivalent to securities, and therefore issuers have to comply with the Securities Act. For other tokens issuers have to properly inform the SEC about the purpose of the token, and consumers about risks.

Following a completely different line, in September 2017 Chinese financial regulators officially banned all ICOs. South Korea followed shortly afterwards, but in both cases the ban seems to be temporary, until proper regulations have been developed.

Regulators from the [UK \(FCA\)](#), [Germany \(Bafin\)](#), [Spain \(CNMV\)](#), [Singapore \(MAS\)](#), [Australia \(ASIC\)](#), [Switzerland \(FINMA\)](#) and others have issued warnings for investors or guidelines for issuers to comply with the minimum consumer protection regulation. In France, the AMF has launched the '[Unicorn](#)' project to develop a specific regulatory framework for ICOs and to give support to companies wishing to issue crypto tokens. Canada's Autorité des marchés financiers (AMF), the financial regulator for the Quebec region, has allowed [the world's first regulated token sale](#) within its regulatory sandbox.

Finally, the ESMA published in November 2017 one [statement](#) for investors, warning about the risks of investing in ICOs, and [a second one](#) for issuing companies, identifying the applicable regulation they should comply with.

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