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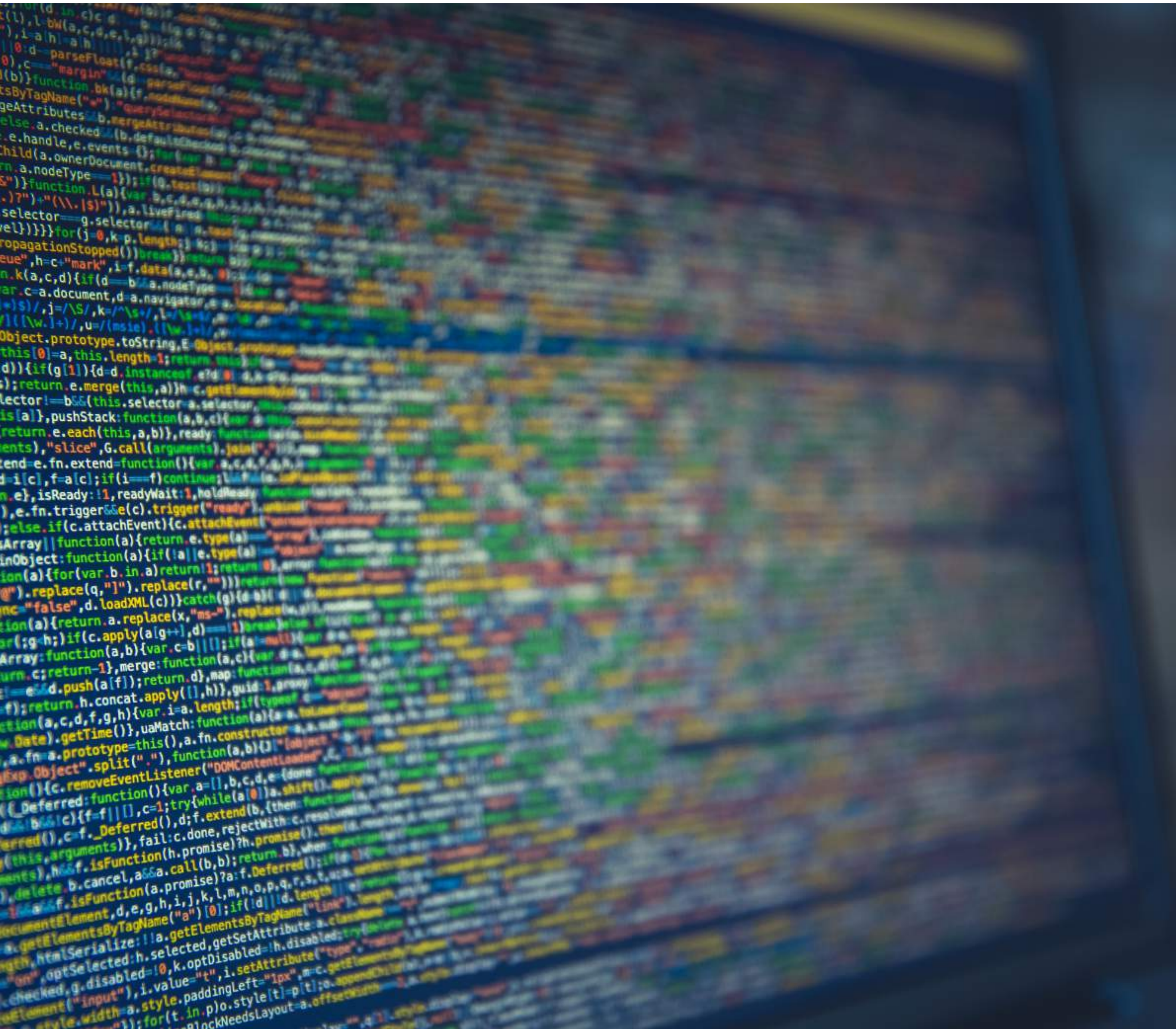
A New Dawn: Venture Capital vs Initial Coin Offerings



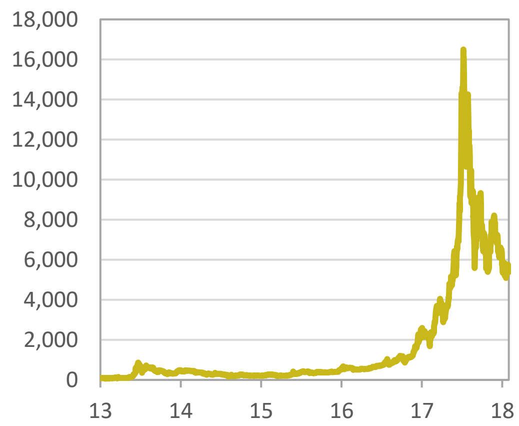
Karsten Bocks & Thomas Heyden

A New Dawn: Venture Capital vs Initial Coin Offerings

The Rise of Cryptocurrencies

In the past two years, the attention around cryptocurrencies - as for instance Bitcoin - has increased remarkably. While it is safe to assume that the sudden (and mind-blowingly fast) rise in the price of Bitcoin and its peak in Q4/2017 was a highly speculative bubble, the question remains whether the current price of Bitcoin (€5,383 as of 07/10/2018) is justified and sustainable.[1]

Bitcoin price in € over the past five years 1



Source: Thomson Reuters Datastream

Although there have been several cryptocurrencies before this example, they were rather unestablished and never close to where cryptocurrencies are today. Why is this the case? This is mainly due to the special technology that enables global and safe transactions between strangers at a rather low cost – Blockchain. Developed in 2008 by Satoshi Nakamoto, Blockchain could make financial intermediaries, i.e. Banks and other payment services, obsolete in the future, at least in specific fields of application.

Besides their mainstream function, i.e. being speculative assets, Blockchain-based cryptocurrencies evolved into an innovative form of financing for young companies using the Blockchain Technology. In the process, the companies issue their own crypto-token or coin and sell them over the internet. These so-called initial coin offerings (ICOs) enable the start-ups to gain access to a large number of small investors

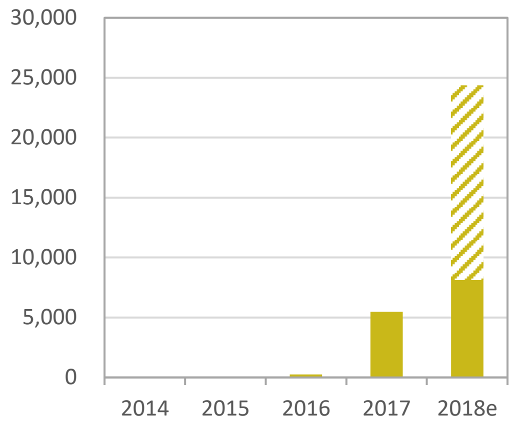
[1] For an economic discussion of Bitcoin see Böhme et al. (2015).

and thus to raise enormous amounts of money.

According to CoinDesk, Inc. there have only been seven ICOs in 2014 and 2015 each with an overall cumulative volume of $39 million. This number was mainly driven by Ethereum's ICO in September 2014, raising more than $18 million. The median ICO size of $0.7 million was comparably small in these two years. The amount raised in 2016 increased by more than 650% (compared to the previous two years) to a total funding volume of $256 million. This fast growth persisted in 2017, raising a total of $5.4 billion, and seems to continue in 2018 as the volume raised from January to May already surpassed the total amount of 2017. Presuming that this growth will persist throughout 2018, our projection indicates that the total amount raised will be more than $16 billion.

For typical start-up companies, it is very difficult to obtain external financing.

ICO size in $ million over the past four years 2



Source: CoinDesk, Inc.

Negative prospected cash flows over the first operative years and the lack of tangible assets prevent them from receiving bank loans or other forms of debt. However, one possible form of financing is a private equity investment, i.e. venture capital (VC). However, according to EY (2017), the amount of money raised in ICOs in October and November 2017 was already twice as much as VC invested in start-ups using Blockchain Technology.

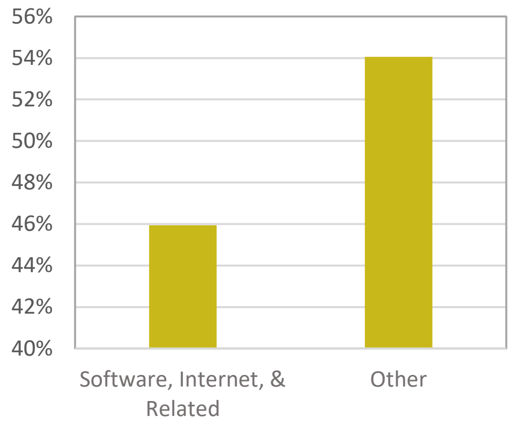
ICOs: A Menace to Venture Capital?

Venture capitalists (VCs) are specialized firms who invest in start-ups' business equity and then manage these investments pro-actively. Some people argue that this makes VC an expensive financing form as entrepreneurs hand over part of their equity stake and control rights (see Sørensen, 2007). As most VCs only acquire minority positions in a start-up's equity, this argument is not entirely true. However, it is obvious that the entrepreneurs' equity stake is substantially diluted in VC transactions. So why are start-ups taking VC in the first place?

According to Hellmann and Puri (2002), VC is much more than pure financing. Moreover, it plays a role well beyond that of traditional financial intermediation. VCs provide the start-up companies with their network, their managerial expertise, and assist them in questions of personnel decisions.

The value of this supporting function is hardly quantifiable.

VC investments in tech and non-tech (2017) 3



Source: Preqin

Given the somewhat different functions of ICOs and VC, a number of difficulties arises in the attempt to compare them:

- In practice, only companies that incorporate the Blockchain technology in their business qualify for undertaking an ICO. Up until now, the Blockchains' well-known problems (i.e. lack of regulation; its complexity; cost of mining) limit its expansion into sectors other than tech. Considering that the share of VC investments in tech-related companies is accounting for a substantial part (see Table 2) of total investments, a comparison is worthwhile.
- There are various types of tokens with different purposes and, hence, different sets of incentives and risks for the entrepreneur. While there is no 'official' classification, tokens can be broadly assigned to three groups:

(1) utility tokens, which have a functionality within the service or product usage offered by the issuer and give the investor the right to trade it in,

(2) security tokens, which entail a voting right or the right to receive some form of dividend or fixed return, and

(3) payment tokens, which have currency-like characteristics.

- The company that offers the tokens does *not* issue new equity. Depending on the type of the token, it can just exhibit similarities to a company share. Closest to a share would be an equity token, which is a security token.

Where is this going?

For now, ICOs could only affect VC within the tech-sector. However, it might be just a matter of time until the digitalization brings Blockchain Technology into other businesses. In the end, the question whether ICOs indeed threaten VC boils down to another question: Is the company only interested in pure financing and customer engagement, or does it seek access to the VCs network, expertise, and reputation? Given the strong evidence for VCs significantly positive impact on the growth and thus on the long-term profitability of start-up companies (see, among others, Colombo and Grilli, 2010; Croce et al., 2013; Hellmann and Puri, 2002), we conclude that VC will not become obsolete in the future. The effects of VC are important for a company's success in the medium- to long-term. In addition, raising capital is one of the most important factors in the success of a company. While the number of financing rounds goes along with a dilution of the founder's share and control in the company, ICOs lay the field for additional financing channels. Under the current regulation, they enable start-ups to hand out tokens without necessarily giving away any control rights. Hence, we see VC and ICOs rather as complements than substitutes. The combination of them might be beneficial for both the VCs and the entrepreneurs:

If VCs back up tech-start-ups in their early stage, the start-up will still have the option of doing an ICO in the expansion phase for financing a specific project, for example. The VCs will not only provide the desired 'coaching' but also a 'signaling' function for ICO investors, which is likely to increase the start-up's credibility and as a result the potential ICO size.

On the other hand, VC is often concentrated in the start-up-hubs of the world, such as Silicon Valley. If an entrepreneur has difficulties in raising VC, for example because of a suboptimal location outside the hub, a successful ICO in the initial phase could increase their credibility and thus their ability to attract VC.

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Appendix

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