

Executive Summary

The introduction of cryptocurrencies has established a new funding method for entrepreneurs to finance their business ventures by selling tokens in an initial coin offering (ICO) (Fisch (2018) and Chen (2017)).

This thesis focuses on the question whether those ICOs are a viable method to raise the needed capital from a solely financial perspective and whether they can rival other funding methods such as venture capital (VC).

Section 1 provides an introduction to the topic of ICOs and is followed by a literature review in section 2 to ensure that this research question hasn't been answered yet in previous works.

Section 3 presents a definition for initial coin offerings and introduces the distinguishment between coins and tokens based on research by Massey, Dalal and Dakshinamoorthy (2018) and Chen (2017).

Furthermore, this section shows the roots of ICOs which started with Mastercoin and Nxt (Smith+Crown (2016)).

This section also introduces Ethereum (ETH), which is the most commonly used platform for ICO tokens according to Smith+Crown (2016). This is going to be confirmed by the data analysis in section 7.

Section 4 introduces definitions for the researched variables, especially focusing on amounts raised and hard caps, the maximum amount that an ICO is willing to raise (Massey, Dalal and Dakshinamoorthy (2018) and (Coinstaker (2018))). It also shows the assumptions which were made when calculating the United States Dollars (USD) values.

The following section presents two initial coin offerings. The first of those being the 0x protocol, an example for an ICO with a hard cap. The second ICO is Dragonchain, which didn't have a hard cap. For these 2 examples, all researched variables are presented.

In section 6, the research method is presented. The research method is based on a consolidated list of names of ICOs. The values for the variables were researched manually from different sources, mainly whitepapers and blogposts by the teams behind the ICOs. Furthermore, the section shows the reasons for exclusion of ICOs from the data. This section

introduces the main hypothesis shown at the beginning of the Executive Summary and further sub hypotheses.

Section 7 presents an analysis of the data, visualized with several histograms and the findings are discussed in section 8. The data show that the mean of the amounts raised can indeed rival funds raised through VC with the mean of the amounts raised being 24.65 Million (Mio.) USD. In absolute numbers, ICOs raise a lot less than is raised through VC which is likely caused by ICOs being a very new phenomenon. A very interesting finding is that on average, 77.55% of the hard cap was raised and 58% of the ICOs in the data reached their hard cap.

The discussion in section 8 shows that the main hypothesis is supported by the data and also provides a short discussion of the sub hypotheses. The section also includes an extensive discussion of the reliability of the data and an outlook for further research. Future regression analyses should be conducted, especially considering the percentage of the supply of a token offered for sale, the hard cap and the duration of the ICO. It also suggests that further research should focus on a more wholesome analysis of ICOs, including empirical and theoretical research to answer the question whether ICOs are a viable alternative to other methods of fundraising. The section discusses the reliability of the data and points out several problems such as data availability, volatility of cryptocurrency prices, several sale stages and the fact that 2017 was a very special year for ICOs (Fisch (2018)). The discussion also points out that the variables % held by top 10 holders and Nr. of addresses continuously change.

Section 9 provides a short conclusion and also emphasizes that future research will have more data available and should also research the businesses which conducted the ICOs and their dynamics.