

Does ICO Founder Education Matter?

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Central Issue of the Paper

How can an investor distinguish a good opportunity in the crypto-space from a poor one, or potentially even a fraudulent one? The paper by Jiafu An, Tinghua Duan, Wenxuan Hou and Xinyu Xu summarized here seeks to answer this question for Initial coin offerings (ICO) tokens.

Tokens are unlike cryptocurrencies such as bitcoin that are designed to enable transactions. ICO participation generally involves purchasing tokens from a blockchain based start-up company. Usually like the stocks of initial public offerings, the tokens are expected to subsequently rise in price as the company becomes successful. Yet sometimes the tokens are not valued as a security but for some utility or other purpose. Either way, in the paper "Initial Coin Offerings and Entrepreneurial Finance: The Role of Founders' Characteristics," success is defined as a completed offering. This means that by selling tokens in the pre-ICO period, the company raised the amount of funds they needed to launch their business. The post-ICO survival rate is not addressed, but this study can help investors avoid losses from a failed offering.

Approach Employed by Paper

The authors begin with a sample of almost 1,000 ICOs as listed on Token Data over the mid-2014 to mid-2018 period: 753 completed ICOs and 233 failed ICOs. This sample suggests the ICO failure rate is quite high (24%). Tests were conducted only on successful ICOs and additional ICO data services were used to obtain ICO characteristic information to complete sets of hypothesis test variables. The dependent variables measuring the degree of success are the amount of capital raised and the number of days to complete the ICO. Independent variables are divided into two major groups: ICO characteristics and founder characteristics, as well as a set of control variables such as the price of bitcoin and gross domestic product (GDP).

The first set of regressions were on a sample of 715 successful ICOs with data for the independent variables for ICO characteristics as listed below. The expected sign for the coefficients of these variables are expected to be positive when explaining the natural logarithms of the amount of capital raised and negative for the natural logarithm of the days to complete the ICO.

Name	Abbreviated Description
Founder	1 if personal information is disclosed, else 0
Advisor	1 if there is an advisory team, else 0
Whitepaper	1 if one exists, else 0
Twitter	1 if account exists, else 0
Telegram	1 if account exists, else 0
CSR	1 if social responsibility is a goal, else 0

The second set of regressions were on a smaller sample of 632 successful ICOs with data for the additional independent variables for founder and team characteristics as listed below.

Name	Abbreviated Description
Education	Ave. education level for founding team
Business	# founders with business background
Blockchain	# founders with blockchain experience
Technology	# founders with technology background
Professor	# founders experienced as a professor
Board	# founders with board experience
Connection	ln(# LinkedIn connections)
Founder size	# of founders
Team Size	Management team size
Advisor	# of advisors

All regressions include the basic control variables, and the second set of regressions for founder characteristics included the ICO characteristic variables as additional control variables. Finally, two regressions that include all independent variables were performed using a Heckman correction to correct for potential selection bias: one regression to explain capital raised and one to explain the speed to complete the ICO.

Findings of the Paper

For the first set of regressions (ICO characteristics), all coefficients had signs as expected and all were statistically significant except Telegram in Panel B - speed to complete ICO. For the second set of regressions (founder characteristics), all coefficients had signs as expected and all were statistically significant except for the regression against the variable Professor and Founder size in Panel A- capital raised, and these two were also insignificant in Panel B- speed to complete ICO, along with board. In the regressions corrected for sample bias, significant variables explaining the amount of capital raised (with signs as hypothesized) include business, management team, and size of the advisory board as well as control variables GDP and bitcoin price. Significant variables explaining the speed to complete the ICO (with signs as hypothesized) include education, business, technology, founder size, advisor size, Telegram and the GDP control variable.

In conclusion, many ICO and founding team characteristics can help determine the potential extent of ICO success. Education matters economically because “if the founding team’s average education level increases from ‘lower than bachelor’ (0) to “master” (2), it would [have a] 5% increase in speed [to ICO completion.] Yet we’ll see in the next newsletter summary “Does A+ Indicate ICO Excellence?” grades (ratings) may not matter in the ICO world.

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