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Human Capital and Funding Success: Evidence from an Indonesian Equity Crowdfunding

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Abstract. *This study examines the impact of human capital on funding success in the context of Equity Crowdfunding (ECF) by analyzing data from 72 start-up companies seeking funding through SANTARA, the first ECF platform in Indonesia. Our findings indicate that various human capital indicators, including the number of directors, team members, economics undergraduate education, and graduates from foreign universities, do not significantly influence ECF success. However, we observed an intriguing result: start-up leaders with undergraduate degrees have a negative impact on crowdfunding success, leading to longer funding durations. This suggests that start-ups in Indonesia should not solely prioritize leaders with impressive educational backgrounds but should also consider individuals with practical experience in the business industry to enhance their chances of crowdfunding success.*

Keywords: *Equity crowdfunding; SANTARA, human capital, funding success, Indonesia*

1. Introduction

In recent years, crowdfunding has become one of the widespread and effective financing alternatives for project initiators and start-ups to raise the necessary funds for business projects (Belleflamme et al., 2010; Mollick, 2014). In the financial services industry, one of the financial technologies (Fintech) innovations in the capital market that can be used by the public is the Fundraising Service through Information Technology-Based Securities Offerings, or more commonly known as Securities Crowdfunding (SCF). Crowdfunding is an internet-based platform that aims to collect a sum of investment funds from the public (Mollick, 2014).

Crowdfunding encompasses four primary categories: Firstly, there is donation crowdfunding, where individuals contribute funds to a project without expecting any form of reward. This category is commonly employed for personal donations towards public goods or humanitarian initiatives (Belleflamme et al., 2015). Secondly, we have reward crowdfunding, which entails offering compensatory benefits, such as discounted prices or tokens of appreciation, to individuals who financially contribute to a project funder (Viotto da Cruz, 2015). Thirdly, there is peer-to-peer lending (P2P) in the form of non-profit and pro-social platforms. In non-profit platforms, lenders anticipate interest as compensation, whereas in pro-social platforms, investors support businesses in developing countries and receive repayment of the loaned amount (Belleflamme et al., 2015). Lastly, we have equity crowdfunding, which involves private companies and individuals investing in business equity, stocks, or debt securities. Founders initiate online fundraising campaigns by offering a specific number of shares for sale, aiming to attract investors on a larger scale (Ahlers et al., 2015).

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Equity Crowdfunding (ECF) itself is part of the Fintech environment that utilizes digital platforms to support entrepreneurs in overcoming financial constraints, making it highly relevant in the initial stages of a business (Blaseg et al., 2021). Entrepreneurs can raise capital from multiple individuals through online platform mediation, with investors receiving dividends as a return on their investment in the ECF platform (Ahlers et al., 2015). ECF players must be able to attract investors to participate in fundraising through the ECF platform.

The success of crowdfunding is influenced by numerous factors, captivating the attention of both scholars and practitioners. Various theories and methodologies can be employed to delve deeper into the mechanisms that shape crowdfunding success. For instance, persuasion theory (Zhou et al., 2018) and signaling theory (Ahlers et al., 2015; Kunz et al., 2017) can be utilized to explore these influences. Moreover, human capital is widely acknowledged as a crucial factor that impacts crowdfunding success, serving as a signal for vital aspects such as attentiveness to new opportunities, effective business planning, and adept business management (Ahlers et al., 2015; Marvel et al., 2016). According to (Barbi & Mattioli, 2019), the human capital possessed by the ECF team is regarded as the foremost aspect considered by investors when contemplating funding a company.

Ahlers et al., (2015); Piva & Rossi-Lamastra, (2018) and Vismara, (2016) have proposed that human capital can be measured by the number of directors, educational level, the field of education, and foreign graduates, and have tested its impact on ECF success, with the results showing a positive effect on ECF success. Human capital is easily one of the first aspects that investors consider before funding a company, as it is a key factor in determining a company's success. Higher-educated founders tend to signal the quality of their business to potential investors (Unger et al., 2011).

This study will investigate the effect of human capital on ECF success by using sample from SANTARA, the first Equity Crowdfunding (ECF) platforms/providers in Indonesia. The human capital will be proxied by the characteristics of directors, teams, and CEOs in ECF.

The Financial Services Authority Regulation (POJK) Number 57/POJK.04/2020 on the Offering of Securities through Technology-Based Information Services provides a legal basis for the growth of Equity-Based Crowdfunding in Indonesia. Based on data as of October 18, 2022, the Securities Crowdfunding (SCF) platform has grown with a total of USD 43.16 million in funding raised through SCF and a total of 127,050 investors and 300 issuers. This makes Indonesia one of the countries with promising crowdfunding growth. Specifically, this study uses one of the platforms that has obtained a license from the Financial Services Authority, namely PT. Santara Daya Inspiratama (SANTARA). Based on data as of October 18, 2022, SANTARA had 91 registered/listed businesses that have successfully raised funds through ECF. The number of SANTARA investors is 61,680 with a total funding of USD 10.01 million from the Santara platform.

The novelty of this research lies in two aspects. First, as far as we know, this is the initial investigation into the success of ECF (Equity Crowdfunding) specifically in Indonesia. Previous studies have predominantly examined crowdfunding success within developed countries, such as Ahlers et al.'s (2015) analysis of ASSOB data from Australia. However, studies focusing on developing countries have been relatively scarce. Second, unlike most prior studies that have concentrated on identifying the factors that determine ECF success, this study places emphasis on human capital, which is measured by the educational background of the platform's CEO. More specifically, we explore the education levels of CEOs, including their undergraduate education, economics education, and any degrees

obtained overseas. Education is considered to have the potential to influence ECF success, serving as a signal to investors (Nitani et al., 2019). Therefore, our study complements Ahlers et al., (2015), Piva & Rossi-Lamastra (2018), and Kleinert et al., (2020).

This study will examine company data on the platform and assess whether the success of ECF projects is influenced by the human capital of the ECF issuer. The research results are expected to be used as a reference for the development of ECF, especially regarding human capital to support ECF success on the SANTARA platform. The findings of this study can also be used as a reference for SMEs that will launch fundraising campaigns on the platform.

This rest of this paper is organized as follows. Section two provides literature review and hypothesis development. Section three highlights the methodology. Section four discuss the findings. Section five concludes.

2. Literature Study / Hypotheses Development

Signaling theory (Ross, 1977). is widely recognized and extensively utilized in crowdfunding research. At its core, signaling theory suggests that a signaler sends a message to a receiver, who then interprets and responds to that signal (Connelly et al., 2010). In the realm of crowdfunding, this theory has been adapted to describe entrepreneurs as the signalers and investors as the receivers. However, signaling in the context of Equity Crowdfunding (ECF) poses distinct challenges compared to traditional public equity financing, primarily due to the reliance on online communication platforms and the limited opportunities for entrepreneurs to directly interact with potential investors.

Numerous studies have explored how signaling theory can address the issue of information asymmetry in ECF. Drawing from the broader field of management, signaling strategies are employed to assess the quality of unobservable projects in the realm of equity crowdfunding. For instance, external social capital and investor experience are identified as crucial signals that help mitigate funding barriers by providing insights into project quality (Davies & Giovannetti, 2018). Moreover, human capital is regarded as an expensive signal that enhances the impact of positive psychological capital, serving as a signal without any associated cost, on crowdfunding performance (Anglin et al., 2018).

A company requires human resources to be able to run its business. Most companies, especially those operating in knowledge-intensive and high-tech industries, heavily rely on human capabilities. Human capital, along with intellectual property, is often one of the most frequently seen criteria for early-stage financing (Zacharakis & Meyer, 2000).

According to the signaling theory (Spence, 1973), the level of education can indicate the quality of human capital. Human resources are a form of signal given to investors about how a business is managed. Professional human resources provide signals for ECF success to investors. (Ahlers et al., (2015) and Piva & Rossi-Lamastra (2018) found that human capital, proxied by the number of directors, directors' education, educational background in economics, and MBA graduates, positively affect ECF success. The following table summarizes research on the influence of human capital on ECF success:

Table 1.
Previous Studies: Signaling Theory and Human Capital

Previous studies	Empirical result
Ahlers et al., (2015)	Human capital (+): board members (+), MBA (+). Social capital (+/-): non-executive board members (%). Intellectual capital (+/-): patents. Retained equity offering (-). Financial information: no disclaimer no information (-; but not on the number of investors).
Piva & Rossi-Lamastra, (2018)	Human Resources: (entrepreneurship education (+, but only specific to business education; others are+/-)
Barbi & Mattioli, (2019)	Number of social media on web pages (+), team size (+), graduates in the team (+/-), professional business experience (+), experience in corporate (+/-)
(Mamonov & Malaga, 2019)	team size (+/-), entrepreneurial industry experience (+/-), serial entrepreneurs (+),
Nitani et al., (2019)	social networks (+, LinkedIn and Facebook), previous startup experience (+), educational degree (+/-)
Vismara, (2019)	sustainability (+/- but attracts more crowd investors, not professionals), team size (+ but not for professionals), entrepreneurial experience (+/-), target funding (+, but only for investors and not for success), offered equity (-)
Kleinert et al., (2020)	Entrepreneurial education (+), technology (-, but only for some investors), exit plan (+), funding goals (+, but only for some investors), types of investors (+)
Ralcheva & Roosenboom, (2020)	offered equity (-), funding goals (+/-), external financing (+), accelerator presence (+), company age (-), team size (+), entrepreneur age (-)
Lim & Busenitz, (2020)	Human resources (+): university education (+), management experience in SMEs (+), management experience in general companies (+/-), startup experience (+), previous business experience (+), ongoing business experience (-), team characteristics (+): team size (+, dummy: single founder or team-based)
Shafi, (2021)	Management: management ranking (+), commitment (+), experience (+/-), skills (+/-). Business: business ranking (+)
Coakley et al., (2022)	Team size [+ single founder (-)], human capital (+), tenurial heterogeneity (+), age heterogeneity (+), advanced degrees (+). Control: (premoney (+/-), company maturity [+ startup dummy (-)], location (+/-), offered equity (+/-). Diversification (-), funding target (+/-), number of investors (+)

Notes: + (positive effect), - (negative effect)

Several recent studies focusing on the educational dimension have found that degree ownership, MBA, and skills have a positive relationship with ECF success (Kleinert et al., 2020; Nitani et al., 2019; Piva & Rossi-Lamastra, 2018; Shafi, 2021). Meanwhile, directors with a background in business education have a significant influence, while educational backgrounds other than business do not have an impact on ECF success. Previous research findings show that human capital resources in ECF provide signals to investors to invest their funds in ECF. Human capital resources can still be considered an important signal for assessing new businesses such as ECF. Based on the above description, we draw the following hypothesis:

H1. Human capital resources have a significant influence on ECF success.

3. Methodology

3.. Data and Sample

Since equity crowdfunding is relatively new in Indonesia, there is limited data available regarding the details of ECF issuers/ start-ups. This makes us unable to combine the data from various ECF platforms. We then use SANTARA as the first ECF platform in Indonesia because they provide quite comprehensive data regarding human capital in their prospectus. Our final data consist of 72 start-ups from the SANTARA platform, collected through the website www.santara.co.id for a period (campaign duration) 2020 to 2021.

3.2. Variables and Measurements

Table 2 shows the definitions of variables, their measurements, and sources. This study uses the number of funding days to measure the success of equity crowdfunding (Ahlers et al., 2015; Li et al., 2016). The dependent variable, ECF success, is measured by the number of days from the start of the offering until the funding target is reached on the equity crowdfunding platform. The fewer the funding days, the more successful the ECF.

Table 2.
Variable Definition

Variable	Definition	Source(s)
Duration	The number of days to achieve funding	(Ahlers et al., 2015; Lukkarinen et al., 2016)
LogDuration	Logarithm of the number of days to achieve funding	(Ahlers et al., 2015)
Directors	The board of directors who manage the ECF business	(Ahlers et al., 2015)
Team	The number of team members in the ECF business	(Barbi & Mattioli, 2019)
EconomicsDegree	CEO with an economics education background	(Piva & Rossi-Lamastra, 2018; Vismara, 2016)
OverseasDegree	CEO who graduated from abroad for their education	(Ahlers et al., 2015)
BachelorDegree	The education obtained by the CEO	(Kleinert et al., 2020; Nitani et al., 2019)
FundTarget_mill	The amount of funds to be raised on the ECF platform	(Dority et al., 2021; Lukkarinen et al., 2016)
LogFundTarget	Logarithm of the amount of funds to be raised on the ECF platform	(Cumming et al., 2021)
Dividend	ECF dividend distribution time	(Vismara, 2016)
EquityShare	The number of shares sold through the ECF platform	(Cumming et al., 2021; Vismara, 2019)
Shares_th	The share price offered on the ECF platform	(Mohammadi & Shafi, 2018)
LogShares	Logarithm of shares	(Kleinert et al., 2020)

The independent variables in this study use several proxies related to human capital, namely the ECF management. Furthermore, human capital can be considered as a signal of how the business is managed. Following previous studies, human capital includes the

number of directors, team size, directors' education, directors' educational backgrounds in economics, and directors who are foreign graduates. Ahlers et al., (2015) and Vismara (2016) found that the board size and project team size positively affect crowdfunding success. For the educational background of the management, this study follows Ahlers et al., (2015) by using the number of board members holding an MBA degree.

In this paper, we also included several control variables, such as business quality. (Lukkarinen et al., 2016) presented evidence that investors are more inspired and interested in projects with larger fundraising targets. Meanwhile, (Hakenes & Schlegel, 2014) stated that investor decisions are positively influenced by projects that reach the funding target amount. The success of ECF can also be influenced by the business sector, as it relates to market trends and social media relevance (Ralcheva & Roosenboom, 2016). Thus, we added business quality as a control variable in the success of ECF. Business quality is proxied by the funding target, dividend distribution, and shares sold by ECF.

3.3. Empirical Model

We formed the following empirical model to examine the impact of human resources on the success of ECF in terms of the speed of funding fulfillment:

$$\begin{aligned} Duration = \alpha &+ \beta_1 \text{ Director } + \beta_2 \text{Team} \\ &+ \beta_3 \text{ EconomicsDegree} \\ &+ \beta_4 \text{ OverseasDegree} \\ &+ \beta_5 \text{ BachelorDegree} \\ &+ \beta_6 LogFundTarget \\ &+ \beta_7 \text{Dividend} \\ &+ \beta_8 \text{ EquityShare} \\ &+ \varepsilon \ldots . (1) \end{aligned}$$

Equation (1) is estimated using ordinary least squares (OLS) because the data collected in this study is in the form of a cross-section.

4. Findings and Discussion

4.1. Descriptive Statistics

The descriptive statistics in Table 3 show the mean, standard deviation, minimum, and maximum values of the variables used in this study. The success of ECF using funding duration has the fastest funding duration of one day and the longest duration of 61 days, with an average value of 9.4 days. The variable of human resource capital measured by the number of directors has the highest value of 4 people and the minimum of 1 person with an average of 1.3. The team has the highest number of 33 people and the lowest of 1 person with an average of 4.47. The CEO's economic education background is 36.1%, while the non-economic education background is 63.9%. The CEO's foreign graduate is 12.5%, while the domestic graduate is 87.5%. The CEO with a bachelor's degree is 50%, while the non-bachelor's degree is 50%.

Table 3.
Descriptive Statistics

Variable	Obs	Mean	Std. dev.	Min	Max
Duration	72	9.431	14.529	1	61
LogDuration	72	1.290	1.345	0	4.110874
Directors	72	1.389	0.742	1	4
Team	72	4.472	3.615	1	33
EconomicsDegree	72	0.361	0.484	0	1
OverseasDegree	72	0.125	0.333	0	1
BachelorDegree	72	0.500	0.504	0	1
FundTarget_mill	72	1790.434	1208.222	500	7000
LogFundTarget	72	21.102	0.649	20.030	22.669
Dividend	72	6.083	0.707	6	12
EquityShare	72	0.407	0.083	0.192	0.490
Shares_th	72	6711.115	7523.347	1.5	30000
LogShares	72	14.400	2.524	7.313	17.217

The control variable of business quality such as the highest funding amount of USD 470.7 thousand and the lowest of USD 33.6 thousand with an average of USD 120.4 thousand. The fastest dividend distribution was within 6 months and the longest was within 12 months with an average of 6 months. The highest equity share was 0.490 and the lowest was 0.083 with an average of 0.407.

Table 4.
Correlation Matrix

		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1)	Directors	1								
(2)	Team	0.16	1							
(3)	EconomicsDegree	0.27	0.15	1						
(4)	OverseasDegree	0.20	0.00	0.42	1					
(5)	BachelorDegree	0.23	0.09	0.69	0.38	1				
(6)	LogFundTarget	0.25	0.18	0.04	-0.02	0.13	1			
(7)	Dividend	-0.06	-0.02	-0.09	-0.04	-0.12	0.12	1		
(8)	EquityShare	-0.25	0.00	-0.02	0.02	-0.01	-0.16	-0.15	1	
(9)	LogShares	-0.08	0.00	0.00	-0.04	-0.12	0.28	0.02	0.38	1

Table 4 shows the correlation results among variables. Based on the Table 4 results, it is known that the correlation value for each independent variable is less than 0.8. Therefore, it can be concluded that all variables, namely *Directors*, Team, *EconomicsDegree*, *OverseasDegree*, *BachelorDegree*, *LogFundTarget*, *Dividend*, *EquityShare*, and *LogShares*, can be considered free from multicollinearity in this model.

4.2 Empirical Result: Human Capital and funding success

The results of the empirical testing with OLS in this study are presented in Table 5A. As previously mentioned, human capital in ECF success is represented by proxies such as *Directors*, *Team*, *EconomicsDegree*, *OverseasDegree*, and *BachelorDegree*. The research findings indicate that *Directors*, *Teams*, *EconomicsDegree*, and *OverseasDegree* do not significantly affect

the success of ECF in Indonesia. Ahlers et al., (2015) found a strong relationship between the number of board members, education, and team size with crowdfunding equity funding success. However, this cannot be empirically proven in this study as the descriptive statistics (Table 2) show that the size of the board, team, and board education is still very small and therefore does not significantly affect ECF success.

Table 5.
Regression Results: Human Capital and Funding Success

	(1)	(2)	(3)	(4)
Directors	-0.344	1.088	-1.308	-1.137
	(-0.12)	(0.39)	(-0.48)	(-0.40)
Team	0.304	0.143	0.866	1.006
	(0.21)	(0.09)	(0.61)	(0.68)
EconomicsDegree	5.897			-1.159
	(1.63)			(-0.23)
OverseasDegree		3.517		-2.167
		(0.63)		(-0.37)
BachelorDegreee			**9.740*** **	**11.20** **
			(2.70)	**(2.11)**
LogFundTarget	**10.11*** **	**11.03*** **	**8.868*** **	**8.583** **
	(3.03)	**(3.24)**	**(2.73)**	**(2.54)**
Dividend	-0.499	-1.039	0.0524	0.114
	(-0.22)	(-0.45)	(0.02)	(0.05)
EquityShare	-20.25	-23.40	-30.32	-30.63
	(-0.86)	(-0.96)	(-1.33)	(-1.29)
LogShares	-0.123	-0.186	0.386	0.421
	(-0.15)	(-0.22)	(0.46)	(0.49)
Constant	**-191.3*** **	**-205.2*** **	**-181.7*** **	**-178.0** **
	(-2.71)	**(-2.84)**	**(-2.69)**	**(-2.55)**
Province dummy	Yes	Yes	Yes	Yes
Business category dummy	Yes	Yes	Yes	Yes
N	72	72	72	72
R-squared	0.562	0.540	0.600	0.602

Notes: Please see Table 2 for the definition of each variable presented in this regression Table. *, **, and *** denotes significance in 10%, 5%, and 1% levels, respectively.

This study find that the *BachelorDegree* variable has a positive effect on the success of ECF, meaning that a business activity led by a bachelor's degree holder tends to have longer funding periods on the ECF platform. In other words, the leadership of a company listed on the ECF platform with a bachelor's degree negatively affects funding success. This result contradicts Spence's 1973 highlighting the role of education as a signal of human resource quality. Individuals with higher education not only have greater knowledge but also higher skills required for survival and business performance. However, in Indonesia, the ECF is still relatively new, so there is no evidence of investment success. The sample shows that only 50% of CEOs with a bachelor's degree cannot convince investors as a basis for investment. Higher levels of education do not always guarantee success as an entrepreneur, especially in the digital world, the experience becomes a more significant determinant of success in entrepreneurship.

This is supported by data from BPS. Based on data from the Central Statistics Agency (BPS) in 2020, there were 129,137 medium and large

trading business units in Indonesia. From this data, 39% of business owners are high school graduates, 10.8% are junior high school graduates, 6.9% of trading business owners are elementary school graduates, 3.6% did not graduate from elementary school, and 5.5% are vocational high school graduates. The percentage of trading business owners with Diploma I / II / III education levels is 4.7%. The last education level of Diploma IV / S1 is 28%, and only 2.4% are graduates of S2 / S3.

Higher education has a negative effect on informal entrepreneurship as it increases awareness and sensitivity to the negative impact on entrepreneurship (Bitros & Karayiannis, 2010; Gössling, 2003). Education does not emerge as a significant determinant in the decision to become an entrepreneur (Uhlaner & Thurik, 2010). (Kleinert et al., 2020) and (Ralcheva & Roosenboom, 2020) found that previous crowdfunding experience is seen by investors as a sign of good project quality that can affect ECF success.

Meanwhile, the control variable for business quality, only the Target Funding variable has a significant effect. The larger the amount of funding requested or campaigned, the longer it takes to achieve funding (Mohammadi & Shafi, 2018). (Hakenes & Schlegel, 2014) state that investor decisions are influenced by the amount of target funding set. The size of the funding goal has been shown to have a significant impact on crowdfunding project success. According to (Mollick, 2014) and (Barbi & Bigelli, 2017), the funding target has a negative impact on ECF results. The higher the ECF funding target, the more investors are needed, which negatively affects investors' intention to invest in ECF with high funding targets (Piva & Rossi-Lamastra, 2018).

This paper also find that Dividends and Equity Shares do not affect ECF success. This is in line with (Vismara, 2016), who found that dividends do not affect ECF success. Equity Share does not affect ECF success, and this result is also consistent with previous research by (Kleinert et al., 2020). Equity share is not a concern for investors because they are more interested in market access and ECF human resource education.

4.3 Further analysis: Province and business category effect

In this section, we examine whether the success of ECF depends on the characteristics (location) of the province where the business activity is conducted and whether the business category also affects the speed of ECF funds raised. The test results are shown in Table 6.

Table 6.
Regression Result: Province and Business Category Effect

	(1)	(2)	(3)	(4)
Province effect				
Banten	8.209	3.332	11.44	12.73
	(0.51)	(0.20)	(0.74)	(0.79)
DIY	4.760	3.036	11.58	13.35
	(0.30)	(0.19)	(0.76)	(0.83)
DKI Jakarta	15.32	13.00	24.26	26.05
	(0.91)	(0.76)	(1.47)	(1.51)
Jambi	1.441	-1.031	5.380	8.588
	(0.07)	(-0.05)	(0.27)	(0.40)
Jawa Barat	6.477	4.200	13.96	15.54
	(0.38)	(0.24)	(0.84)	(0.90)
Jawa Tengah	15.25	12.76	21.74	23.29
	(0.94)	(0.76)	(1.38)	(1.42)

Table 6. (Continued)
Regression Result: Province and Business Category Effect

	(1)	(2)	(3)	(4)
Province effect				
Jawa Timur	6.271	4.082	13.90	15.84
	(0.38)	(0.24)	(0.86)	(0.93)
Sumatera Selatan	0.599	-0.318	3.275	4.191
	(0.03)	(-0.02)	(0.19)	(0.24)
Business category effect				
Community and other roles	-14.81	-13.50	-15.22	-16.40
	(-1.13)	(-0.98)	(-1.21)	(-1.25)
Health Services and Social Activities	-13.71	-14.87	-13.74	-14.31
	(-1.03)	(-1.10)	(-1.09)	(-1.11)
Education Services	27.47	30.30*	27.27	**28.83***
	(1.59)	(1.70)	(1.66)	**(1.69)**
Wholesalers and Retailers	-15.02	-15.98	-12.01	-13.05
	(-1.09)	(-1.11)	(-0.91)	(-0.95)
Provision of Accommodation and Food and Drink	-10.23	-7.239	-10.15	-11.13
	(-1.02)	(-0.68)	(-1.06)	(-1.08)
Wholesale and Retail Trade	-10.33	-7.226	-12.16	-13.34
	(-1.01)	(-0.67)	(-1.24)	(-1.27)
Warehousing and Transportation	-26.01	-26.38	**-34.05****	**-35.78****
	(-1.57)	(-1.56)	**(-2.13)**	**(-2.13)**
Farming	-13.32	-10.41	-15.30	-16.40
	(-1.22)	(-0.92)	(-1.46)	(-1.48)
Retail/Distribution/Logistics	-19.07	-9.252	-36.37	-41.49
	(-0.43)	(-0.20)	(-0.84)	(-0.91)
Leasing Business and Company Services	-25.83	-31.56*	-20.28	-21.30
	(-1.49)	(-1.82)	(-1.22)	(-1.25)

Based on Table 6, provinces do not have an effect on the success of ECF. This is because many ECFs come from the island of Java, while the business categories of Education Services, Warehousing, and Transportation have an impact on the success of ECF. The education services sector has a positive effect, meaning that the fundraising period is longer. Meanwhile, the warehousing and transportation businesses have a negative effect, indicating that fundraising is easier to achieve in these sectors. The study by (De Crescenzo et al., 2020) shows that the industrial sector has a positive impact on the success of ECF. Currently, the warehousing and transportation sector is becoming a very attractive business due to the increasing e-commerce transactions in Indonesia that require warehousing services for shipping goods. Meanwhile, the COVID pandemic has caused a longer fundraising period for education businesses due to social restrictions and online learning processes.

4.4 Robustness checks

We conducted a robustness test by replacing the dependent variable Duration with Logarithm Duration. The test results can be seen in Table 7.

Table 7.
Robustness Check: Log Duration

	(1)	(2)	(3)	(4)
Directors	-0.215	-0.0857	-0.321	-0.287
	(-0.81)	(-0.34)	(-1.27)	(-1.11)
Team	-0.143	-0.147	-0.0948	-0.0630
	(-1.04)	(-1.05)	(-0.71)	(-0.46)
EconomicsDegree	0.413			-0.201
	(1.23)			(-0.43)
OverseasDegree		-0.0274		-0.541
		(-0.05)		(-1.00)
BachelorDegreee			**0.817****	**1.115****
			(2.44)	**(2.29)**
LogFundTarget	**1.457*****	**1.505*****	**1.343*****	**1.275*****
	(4.70)	**(4.79)**	**(4.46)**	**(4.12)**
Dividend	-0.0496	-0.0869	0.00398	0.0201
	(-0.23)	(-0.41)	(0.02)	(0.10)
EquityShare	-1.304	-1.367	-2.133	-2.134
	(-0.60)	(-0.61)	(-1.01)	(-0.98)
LogShares	-0.0949	-0.104	-0.0506	-0.0442
	(-1.22)	(-1.31)	(-0.66)	(-0.56)
Constant	**-27.17*****	**-27.80*****	**-26.24*****	**-25.31*****
	(-4.15)	**(-4.17)**	**(-4.18)**	**(-3.96)**
Province dummy	Yes	Yes	Yes	Yes
Business category dummy	Yes	Yes	Yes	Yes
N	72	72	72	72
R-squared	0.560	0.545	0.597	0.610

The result of the durability test using *LogDuration* shows the same result, which is that having a bachelor's degree has a positive influence on the duration of funding, or in other words, lowers the success of ECF. The robustness test also found that the funding target is the most significant predictor of funding success, as found in the initial analysis results.

5. Conclusion

This study aims to examine the effect of human capital on the start-up funding success on the SANTARA platform in Indonesia. This study finds a empirical evidence that having a director/leader with a bachelor's degree in a company is positively and significantly increase the duration of funding on the ECF platform. In other words, having a bachelor's degree lowers the level of funding success. This finding can generally serve as a reference in formulating policies for the start-ups what want to seek funding through the ECF platform to pay attention and improve the quality of human capital they have. Our empirical finding suggests that the funding success is not solely produced by the education level of company leaders. The other factors such as business experience or tenure, might have a significant impact on fundraising success on the ECF platform, as also suggested by many prior studies (Ahlers et al., 2015; Lukkarinen et al., 2016; Piva & Rossi-Lamastra, 2018; Shafi, 2021). This study is limited only to the SANTARA ECF platform. For further research, we recommend to add other Securities Crowdfunding (SCF) platforms in Indonesia, such as BIZHARE, CROWDANA, SHAFIQ, and others, or ECF platforms outside of Indonesia. In supporting SCF success in Indonesia, the synergy between regulators (OJK) and the SCF

industry is needed in providing literacy to the public so that more small and medium-scale entrepreneurs register their businesses to obtain project funding through SCF and more investors are interested in investing in projects on the SCF platform.

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