

Deciphering the dynamics of financing choices in Indonesian micro-industries: An empirical analysis of internal and external sources

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Abstract

This study analyzes micro-industry characteristics influencing their choice between internal (own capital) and external financing sources (venture capital, banks, and others). A sample size of 83,616, derived from the BPS Survey, was employed for this purpose. Logistic regression analysis was utilized to address the research questions. The findings suggest that own capital financing predominantly supports micro-industries that are small in scale, possess a low business entity status, have mature owner age, have owners with higher educational backgrounds, and exhibit minimal innovation. Conversely, venture capital financing is more inclined towards larger micro-industries with increasing maturity and more innovations. Bank financing is typically allocated to younger micro-industries with higher business entity status, younger owners, lower income, and those incorporating internet usage. Other forms of capital financing are more likely to be selected by micro-industries with owners who have a lower educational background. The characteristics of micro-industries significantly enhance the probability of opting for bank financing. The educational background of the owner is a critical factor in choosing one's own capital and venture capital financing. In contrast, the size of the micro-industry plays a pivotal role in selecting bank and other capital financing.

Keywords: *Banking and finance, Indonesian micro-industries, Micro-industry financing*

JEL Classification: G32, L26, O16

INTRODUCTION

Financial funding is critical during a company's establishment and expansion phases. This funding is sourced internally, through personal capital, and externally, including banking, venture capital, and market capital. Venture capital and market financing are especially prominent, though entering these markets poses challenges. Alicia (2002) emphasizes the importance of banking financing for new companies, as it provides essential support during their initial stages. Concurrently, venture capital is a vital financial institution for entrepreneurs grappling with inadequate human resources and a lack of initial capital, particularly in businesses with significant growth potential.

The principal mission of venture capital is to invest through capital participation, differing from banks and other financial institutions in its foundation on risk-sharing, a concept not typically found in conventional banking (Sartika et al., 2019).

The life cycle theory, introduced by Penrose (2009), is instrumental in describing a company's developmental stages. Timmons et al., cited by Muchira (2019), note that this theory elucidates development regarding funding needs and capital structure. Initially, companies rely on internal funding, progressing to external sources as they develop, which reduces asymmetric information due to external parties' enhanced ability to assess creditworthiness (Lucey, 2011; Psillaki & Daskalakis, 2009).

The pecking order theory, proposed by Myers (1984), outlines a hierarchical approach to corporate financing. Companies initially utilize internal funds, followed by debt and external capital. This hierarchy is a strategic choice by management, prioritizing internal over external funding and selecting funding sources based on risk and demand (Ann et al. 2012). The theory suggests that companies aim to minimize information asymmetry and regulate ownership using internal funding, debt, and equity (Berger & Goulding, 2014). Most SMEs prioritize internal cash flow or external equity sources, considering availability and opportunity cost (Abiola, 2016). They typically resort to external forms of debt and equity only after exploiting private funding sources, assuming they possess more comprehensive information about the company's condition than external investors. Asymmetric information often leads investors to demand higher returns than expected from debt (Frank & Goyal, 2003). Given that many SMEs are at the startup stage with limited access to bank credit and a lack of retained earnings, venture capital financing becomes a viable option. This theory assists researchers in understanding the characteristics of SMEs and entrepreneurs as independent variables, facilitating a deeper analysis to predict variables relevant to research criteria (Muchira, 2019).

Their age significantly influences the companies' accessibility of financial products. Older companies typically have access to a broader range of financial options than younger ones. This disparity stems from the fact that younger companies are in the initial stages of their life cycle, focusing primarily on growth and income generation. Their inherent high risks, low viability, and the need for substantial investment make them less appealing to traditional banking institutions. Despite these challenges, Siedschlag & Murphy (2015) note the potential of young companies to create jobs and grow.

Biney (2018) highlights that younger companies face limited access to external financing due to their relatively short track record and limited collateral, making it challenging to secure external financing. This is echoed by research conducted by Abor (2005) and Peneder (2010), which found a negative and significant impact of a company's age on the ability to access venture capital financing. Conversely, research by Biney (2018) and Muchira (2019) suggests a positive but insignificant effect of company age on securing venture capital, while Musamali (2013) found a positive and significant effect. Mature companies, having a history of borrowing, are often more favored in lending decisions (Makoni & Ngcobo, 2014). In contrast, their limited performance history makes younger companies less suitable for bank financing.

The status of a business entity also plays a crucial role in financing. Firms with a higher status are perceived as more credible and, thus, are more likely to receive external financing from banks and other financial institutions (Cassar, 2004). Biney (2018) further supports this by demonstrating that a higher business entity status

positively and significantly impacts the ability to access venture capital financing. Essentially, a higher status correlates with easier access to venture capital.

Regarding the influence of managerial demographics on financing, the age of the owner/manager presents a mixed picture. Biney (2018) found that age had a positive but insignificant effect on venture capital financing, while Peneder (2010) observed a negative and significant effect. This implies that the age of the owner/manager can have a varying impact on financing access, either facilitating or hindering it.

Lastly, the academic qualifications of SME owners are also a factor in securing funding. Entrepreneurs with higher educational levels are often viewed as more efficient and reliable, gaining greater confidence from fund providers (Zhang, 2008; Sena et al., 2012). Even though some studies indicate that the statistical significance of education in accessing financing is not strong, the general trend suggests a positive relationship between higher education and the use of financing from external sources.

The synthesis of various research findings reveals a consistent trend: the educational background of a business entity's manager or owner significantly influences their ability to access financing. This correlation suggests that higher educational qualifications of business leaders are associated with greater ease in securing financing. In contrast, lower educational levels of managers or owners typically result in more challenges or reduced opportunities in obtaining venture capital financing.

Löfström et al. (2013) highlight a disparity in external financing access between low-income and high-income entrepreneurs, noting that the latter group is more likely to secure such funding. Biney (2018) corroborates this observation, illustrating a positive and significant correlation between SME income and venture capital financing. Similarly, Adrian & Tarigan's (2014) study underscores the positive impact of income on venture capital investment in Indonesia's mobile application sector.

Engel (2014) employs a statistical score-matching procedure to demonstrate that innovative companies are more likely to receive venture capital, which catalyzes their growth. Peneder (2010) echoes this finding, emphasizing the 'positive selection effect' wherein venture capitalists prioritize innovative firms, expediting the commercialization and market introduction of new products. Additionally, Peneder's research underlines the significant role of patents in securing venture capital financing.

Djalil et al.'s (2017) research further expands on the investment preferences of venture capitalists, particularly towards rapidly developing companies in sectors like information technology, with a notable propensity for embracing new technologies.

The passage also discusses the influence of the business age on financing accessibility. As Biney (2018) suggests, older companies often have an advantage in securing financing due to their more established guarantees than their younger counterparts.

Alicia (2002) examines the characteristics of Indonesian micro and small industries (SMIs) regarding financing opportunities. The passage outlines the crucial role of SMIs in the Indonesian economy, as identified by the Central Bureau of Statistics (BPS RI, 2013). It underscores the capital challenges faced by these industries. The study aims to categorize SMI financing into four types - self-financing, banks, venture capital, and other sources - and to analyze the characteristics influencing their financing choices.

The relationship between firm size and access to financing is a central theme in the passage. Du & Girma (2012), Pandula (2011), Peneder (2010), Wu et al. (2008), Berger & Udell (2006), and Makoni & Ngcobo (2014) contribute to this discourse,

highlighting the constraints smaller companies face in obtaining external financing, especially from lending institutions. The consensus among these studies is that larger firms have a better chance of accessing external financing.

Lastly, the passage touches upon the diversity of financing sources available to business units and the factors influencing their selection. The study by Biney (2018) and Peneder (2010) sheds light on the various elements that affect SMEs' ability to access venture capital in Ghana, including demographic factors like gender, age, and educational background of the owner, as well as company-specific factors like age and size.

This research offers valuable insights for micro and small industries (SMIs) in Indonesia, focusing on strategies to secure financing. The study aims to equip these industries with knowledge and tactics to enhance their prospects for obtaining financial support. By doing so, it is anticipated that more business opportunities will be created, leading to increased employment within the financial sector and the SMIs. Such developments are expected to have a positive impact on Indonesia's economy.

METHODS

Data used

This study uses secondary data from the Indonesian Central Statistics Agency survey results in 2019. From a population of 90,295, a sample of 83,161 Micro industry was obtained with complete information.

Operational definitions of variables.

The main SMI variables used in this study include funding sources, company size, company age, legal status, owner's age, owner's education, revenue, innovation, and use of internet technology. The operational definitions of the main variables used in this study are given as follows:

Table 1. Operational definitions of variables

No	Variable	Definition	Indicator	Scale	Variable type
1	Owned Capital	Financing sourced from SMI's Own Capital	1 = SMI using its own capital, 0 = SMI not using its own capital	Dummy	Dependent
2	Venture Capital	Financing sourced from non-bank financial institutions	1 = SMI using venture capital, 0 = SMI not using venture capital	Dummy	Dependent
3	Bank	Financing sourced from bank financial institutions	1 = SMI using bank capital, 0 = SMI not using bank capital	Dummy	Dependent
4	Other	Financing from sources other than own capital, venture capital, and banks	1 = SMI using other capital, 0 = SMI not using other capital	Dummy	Dependent
2	SizeSMI	Small Micro Industry	1 = Small Industry, 0 = Micro Industry	Dummy	Independent
3	SMIage	Classification of micro and small industries based on the total age of the owner	Total Age of Owner	Ratio	Independent
4	OwnerEduc_D	Educational background of SMI owner	0 = Did not finish junior high school, 1 = Finished Junior high	Dummy	Independent

No	Variable	Definition	Indicator	Scale	Variable type
5	OwnerAge	Year starting SMI production	Year	Ratio	Independent
6	LegalStatus_D	Ownership status of a business entity	1 = Legal entity, 0 = Not legal entity	Dummy	Independent
7	Internet_D	Internet use by SMI	1 for internet use, 0 for not using internet	Dummy	Independent
8	Inovasi_D	Trademark certificate in marketing the product	1 = Have Trademark, 0 = Have not trademark	Dummy	Independent
9	Rev	SMI's income derived from IM's operational activities	Total Income	Ratio	Independent

Source: BPS (2019), reprocessed by researchers (2022).

Conceptual framework and hypotheses

Based on the theories and previous studies presented in the introduction, the following conceptual framework can be generated:

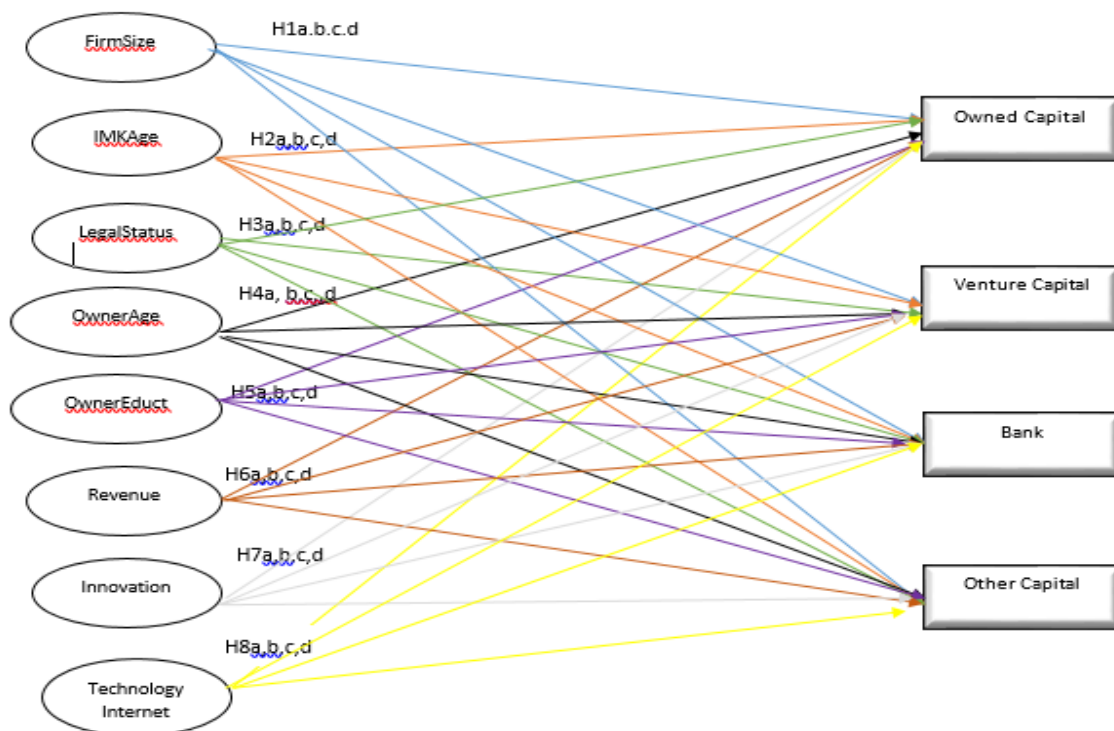


Figure 1. Conceptual framework

The size of a firm can significantly influence the type of financing it attracts. Traditionally, larger enterprises boast more established assets and financial histories, making them appealing candidates for diverse funding sources. This includes equity financing (Owned Capital), venture capital (Venture Capital), bank loans (Bank), and other forms of financing (Other Capital).

The age of a company is frequently associated with stability and reputation. Older firms may be perceived as more credible due to their longer track records, which can be

a compelling factor for investors. The legal status of a company, such as its compliance with relevant regulations and registration, may affect its ability to access external sources of financing.

The owner's age may reflect a depth of experience and maturity in business management, potentially influencing the decisions of investors and lenders. Owner education is often linked to enhanced managerial skills, which can bolster the confidence of investors and financial institutions. A robust revenue stream can indicate a solid company performance, increasing the likelihood of securing external funding.

Innovative companies will likely be more appealing to venture capitalists looking for high-growth opportunities. However, this might be less pertinent for traditional financing, such as bank loans. Adopting technology, particularly the internet, may indicate a progressive and adaptable company, which could attract various types of financing.

Furthermore, based on the previously presented conceptual framework, the research hypotheses can be formulated as follows:

- Hypothesis 1a: The size of SMI has a negative and significant effect on accessing own capital financing
- Hypothesis 1b: The size of SMI has a positive and significant effect on accessing venture capital financing
- Hypothesis 1c: The size of SMI has a positive and significant effect on accessing banking financing
- Hypothesis 1d: The size of SMI has a positive and significant effect on accessing other capital financings
- Hypothesis 2a: SMI age has a negative and significant effect on accessing own capital financing
- Hypothesis 2b: Age of SMI has a positive effect on accessing venture capital financing
- Hypothesis 2c: Age of SMI has a positive and significant effect on banking financing.
- Hypothesis 2d: Age of SMI has a positive and significant effect on other capital financings.
- Hypothesis 3a: The status of the business entity has a negative and significant effect on accessing its owned capital financing
- Hypothesis 3b: Business entity status has a positive and significant effect on accessing venture capital financing
- Hypothesis 3c: The status of the business entity has a positive and significant effect on accessing banking financing
- Hypothesis 3d: The status of the business entity has a positive and significant effect on accessing other capital financings
- Hypothesis 4a: The owner's age has a negative effect on accessing equity financing
- Hypothesis 4b: The owner's age has a positive effect on accessing venture capital financing
- Hypothesis 4c: The owner's age has a positive effect on accessing bank financing
- Hypothesis 4d: The owner's age positively influences accessing other capital financings.
- Hypothesis 5a: The owner's educational background has a negative and significant effect on accessing their own capital financing
- Hypothesis 5b: The owner's educational background has a positive and significant effect on accessing venture capital financing

- Hypothesis 5c: The owner's educational background has a positive and significant effect on accessing banking financing
- Hypothesis 5d: The owner's educational background positively and significantly affects accessing other capital financing.
- Hypothesis 6a: Income has a negative and significant effect on accessing equity financing
- Hypothesis 6b: Income has a positive and significant effect on accessing venture capital financing
- Hypothesis 6c: Income has a positive and significant effect on accessing banking financing
- Hypothesis 6d: Income positively and significantly affects accessing other capital financings.
- Hypothesis 7a: Innovation has a negative and significant effect on accessing equity financing
- Hypothesis 7b: Innovation positively and significantly affects accessing venture capital financing.
- Hypothesis 7c: Innovation has a positive and significant effect on accessing banking financing
- Hypothesis 7d: Innovation positively and significantly affects accessing other capital financings.
- Hypothesis 8a: The use of internet technology has a negative and significant effect on accessing self-financing
- Hypothesis 8b: The use of internet technology has a positive and significant effect on accessing venture capital financing
- Hypothesis 8c: The use of internet technology has a positive and significant effect on accessing banking financing
- Hypothesis 8d: Internet technology positively and significantly affects accessing other capital financing.

Analysis tools

The analysis uses a logistic regression model with the following four equations (eq. 1 – eq.4):

$$\ln \frac{OC_i}{1-OC_i} = \beta_{0i} + \beta_{1i}SizeIMK_D + \beta_{2i}IMKAge + \beta_{3i}Legalstatus_D + \beta_{4i}OwnerAge + \beta_{5i}OwnerEduct_D + \beta_{6i}Rev + \beta_{7i}Inov + \beta_{8i}Internet + \varepsilon \dots\dots\dots (1)$$

$$\ln \frac{VC_i}{1-VC_i} = \beta_{0i} + \beta_{1i}SizeIMK_D + \beta_{2i}IMKAge + \beta_{3i}Legalstatus_D + \beta_{4i}OwnerAge + \beta_{5i}OwnerEduct_D + \beta_{6i}Rev + \beta_{7i}Inov + \beta_{8i}Internet + \varepsilon \dots\dots\dots (2)$$

$$\ln \frac{Bank_i}{1-Bank_i} = \beta_{0i} + \beta_{1i}SizeIMK_D + \beta_{2i}IMKAge + \beta_{3i}Legalstatus_D + \beta_{4i}OwnerAge + \beta_{5i}OwnerEduct_D + \beta_{6i}Rev + \beta_{7i}Inov + \beta_{8i}Internet + \varepsilon \dots\dots\dots(3)$$

$$\ln \frac{Other_i}{1-Other_i} = \beta_{0i} + \beta_{1i}SizeIMK_D + \beta_{2i}IMKAge + \beta_{3i}Legalstatus_D + \beta_{4i}OwnerAge + \beta_{5i}OwnerEduct_D + \beta_{6i}Rev + \beta_{7i}Inov + \beta_{8i}Internet + \varepsilon \dots\dots\dots (4)$$

Noted: *OCi, Owned Capital, VC: Venture Capital, Bank, Other; Other financing, OA; owner age, Educt; Educational background, FA; Firm Age, FS; Firm Size, Legal; Legal status, Rev; revenue, Inov; innovation, Tech; internet technology. 0 is a constant, while 1 to 8 is the value of the regression coefficient*

RESULTS AND DISCUSSION

Descriptive statistics

Table 2 offers a detailed summary of variables observed within a dataset comprising 83,616 entries. It is meticulously organized to display essential statistical metrics for each variable, encompassing the mean, standard deviation, minimum, and maximum values. Such an arrangement facilitates a reasonable evaluation of the data's central tendencies and variability.

Table 2. Descriptive statistics

Variable	Obs	mean	Std. Dev.	Min	Max
ModalSendi~D	83.616	.9721943	1644167	0	1
ModalVentu~D	83.616	.006183	0.0783892	0	1
Bank	83.616	.078406	.2688111	0	1
Other	83.616	.053937	.2258948	0	1
SizeSMI_D	83.616	.065549	0.065549	0	1
SMIage	83.616	13.4055	10.92552	1	119
Legalstatus_D	83.616	0.05311	0.224278	0	1
OwnerAge	83.616	46.56205	11.2701	14	99
OwnerEduct_D	83.616	0.33763	0.472907	0	1
Rev	83.616	1.56e+07	1.13e+08	12800	1.80e+10
Internet_D	83.616	.1546714	.3615933	0	1
Innovation_D	83.616	.0252105	.1567648	0	1

Based on the information provided in Table 2, we can discern two distinct data types in the study: discrete and continuous. Discrete data, which consists of distinct, separate values, includes variables such as own capital, venture capital, bank financing, other forms of financing, SMI size, legal status, educational background, internet usage, and the level of innovation in Small and Medium Industries (SMIs) in Indonesia. These variables are categorical or countable, meaning they take on fixed and distinct values.

On the other hand, continuous data includes variables that can take on a range of values and are measured on a continuous scale. In this study, the age of the SMI, the age of the SMI owner, and the income earned by the SMI are examples of continuous data. For instance, the age of the SMI varies from a minimum of 1 year to a maximum of 119 years, indicating a broad spectrum of business maturity levels within the surveyed SMIs. Similarly, the age of the SMI owners ranges from 14 to 99 years, reflecting a diverse group in terms of generational perspectives and experiences. The income variable also shows considerable variation, ranging from as low as 12,800 to as high as 18,000,000,000 in 2019, highlighting the significant disparities in financial success among these businesses.

Hypothesis testing results

The outcomes of hypothesis testing, derived from data analysis via logistic regression, are presented. The data were processed using Stata, yielding the following results (Table 3).

The results of logistic regression hypothesis testing reveal that the size of Small and Medium Industries (SMI) significantly influences various types of financing. Specifically, a larger SMI size positively and significantly impacts the likelihood of securing financing from venture capital, banks, and other external sources. Conversely,

a smaller SMI size enhances the probability of obtaining internal financing, such as own capital, indicating a negative yet significant relationship. Smaller industries have better chances of sourcing internal financing, while larger companies are more likely to secure external financial support, including venture capital, bank loans, and other forms. So H1a, H1b, H1c and H1d are accepted.

Table 3. Logistics regression test results

Information		SizeS MI_D	SMIage	Legalsta tus_D	Owner Age	Owner Educt_ D	Rev	Innovati on_D	Internet _D
Model I (OC)	Coef.	-0.306	0.001	-0.62	0.019	0.252	-0.8.03e-11	-0.221	0.014
	OR	0.735	1,001	0.537	1.019	1,287	1	0.802	1.014
	Sign.	0.000	0.77	0.000	0.000	0.000	0.491	0.058	0.818
Model II (VC)	Coef.	0.809	0.017	0.136	-0.034	-0.598	1.68E-10	0.433	0.024
	OR	2,247	1.017	1.145	0.966	0.549	1	1.542	1.024
	Sign.	0.000	0.000	0.477	0.000	0.000	0.186	0.064	0.848
Model III (Banks)	Coef.	0.874	-0.004	0.811	-0.01	0.074	4.52E-10	0.302	0.709
	OR	2,397	0.995	2.251	0.989	1.077	1	1.353	2,033
	Sign.	0.000	0.007	0.000	0.000	0.01	0.000	0.000	0.000
Model IV (Other)	Coef.	0.802	0.003	-0.239	-0.012	-0.516	-1.18 e-10	-0.061	0.09
	OR	2.233	1.003	0.787	0.987	0.596	1	0.94	1.094
	Sign.	0.000	0.046	0.002	0.000	0.000	0.559	0.553	0.044

Furthermore, the age of SMI plays a distinctive role in financing types. Older SMIs have a positive and significant effect on obtaining venture capital and other forms of financing, suggesting that maturity in the industry enhances financing opportunities. However, the age of SMI does not significantly influence the likelihood of receiving bank financing or internal funding. This finding indicates that regardless of an SMI's age, it does not significantly affect the potential for bank and own capital financing. So, H2b and H2d are accepted, and H2a and H2c are rejected.

Business legality also emerges as a critical factor. It positively influences the likelihood of obtaining bank and other external financing. At the same time, a lack of legal status in SMIs tends to increase the chances of securing internal (own capital) financing. However, the legal status of an SMI does not significantly affect venture capital financing opportunities. So, H3a and H3c are accepted, while H3b and H3d are rejected.

The owner's age and educational background are also significant determinants. Older owners are more likely to secure equity (own capital) financing, whereas younger owners have better prospects for external financing. So H4a, H4b, H4c and H4d are rejected. The educational level of SMI owners positively influences the probability of obtaining their own capital and bank financing. In contrast, a lower educational level increases chances for venture capital and other external financings. So H5c is accepted, while H5a, H5b, and H5d are rejected.

The study reveals that income positively and significantly influences bank financing for Small and Medium Industries (SMI), indicating that higher income levels significantly enhance SMIs' chances of securing bank loans. However, this effect is insignificant for self-financing, venture capital, and other financing types. Consequently, while income is a crucial determinant for bank financing, it does not significantly affect the likelihood of obtaining other financing forms. So that H6c is accepted, H6a, H6b and H6d are rejected.

In contrast, the innovation variable positively and significantly impacts venture

capital and banking financing. This suggests that greater innovation within SMIs increases their chances of acquiring venture capital and bank financing. Nonetheless, innovation seems to have a negligible and non-significant effect on self-financing and other financing types, indicating its limited influence in these areas. The odds ratio (OR) of 1.542 for innovation underscores its substantial role in enhancing the probability of obtaining venture capital financing. So H7a, H7b, and H7c are accepted while H7d is rejected.

The internet variable's positive and significant effect is evident in banking financing and other capital types. This implies that SMIs utilizing the internet have better chances of securing these financing forms. However, the internet's influence on self-financing and venture capital is positive but not statistically significant, suggesting a limited role in these financing types. The OR of 2.033 for the internet variable highlights its substantial impact in boosting the probability of securing bank financing. So H8a and H8b are rejected while H8c and H8d are accepted.

For self-capital financing, factors like the owner's age, educational background, and innovation positively and significantly influence the likelihood of obtaining this type. This indicates that older owners with higher educational levels and more innovative practices have better chances of acquiring their own-capital financing. Conversely, smaller SMI size and lower SMI legal status are negatively and significantly associated with own-capital financing, suggesting that smaller and less legally established SMIs are more likely to secure this financing type. The owner's educational background emerges as the most influential factor.

In venture capital financing, larger SMI size and longer SMI age positively and significantly affect the likelihood of securing this financing. This implies that larger and more established SMIs have better opportunities to obtain venture capital. In contrast, younger owners' age and lower educational backgrounds are negatively associated with securing venture capital, indicating that younger owners and those with less education are more likely to obtain this funding. The OR of 2.247 for the owner's educational background underscores its significance in this context.

For bank financing, several factors, including SMI size, legal status, owner's educational background, income, innovation, and internet use, positively and significantly impact the likelihood of obtaining bank financing. This suggests that larger, legally established SMIs with educated owners, higher incomes, innovative practices, and internet utilization are more likely to secure bank loans. On the other hand, younger SMIs and owners' ages negatively influence this likelihood, indicating that younger SMIs and owners have greater chances of obtaining bank financing. The OR of 2.397 for SMI size highlights its critical role.

Lastly, for other financing types, larger SMI size, older SMI age, and internet use positively and significantly affect the likelihood of obtaining this financing. This suggests that larger, older SMIs that utilize the internet are more likely to secure other forms of financing. In contrast, lower legal status, younger owner age, and lower educational backgrounds negatively influence this likelihood, implying that SMIs with these characteristics are more likely to obtain other financing types. The OR of 2.233 for SMI size emphasizes its significant impact in this scenario.

Discussion

This study elucidates the multifaceted dynamics of financing in Small and Medium Industries (SMIs). A key finding is the inverse relationship between the size of an SMI and its reliance on internal capital. Smaller SMIs prefer self-financing, while

larger ones seek venture capital. This observation aligns with Du & Girma's (2012) assertion that smaller companies face challenges in accessing external financing, often due to insufficient information and lack of audited financial reports, as Pandula (2011) noted. Contrarily, Wu et al. (2008) and Peneder (2010) found a positive correlation between firm size and the ability to secure venture capital. However, Biney (2018) and Musamali (2013) presented more nuanced views on this relationship.

The age of an SMI also plays a critical role in financing choices. Younger SMIs generally prefer self-capital due to their limited track records and high-risk profiles, which deter bank financing. This is consistent with Siedschlag and Murphy's (2015) research, highlighting that older companies have broader access to financial products. However, Biney (2018), Abor (2005), and Peneder (2010) present contrasting findings regarding the impact of a company's age on venture capital accessibility.

Additionally, the study reveals a link between the status of the business entity and its financing sources. Higher-status entities are more likely to obtain bank financing, as they are perceived as more credible, following Cassar's (2004) observations. Conversely, lower-status entities struggle to attract external financing.

Interestingly, the SMI owner's age inversely influences the financing type. Younger owners are more inclined towards bank financing, possibly due to their limited personal capital and higher risk tolerance. Vos et al. (2007) and Wu et al. (2008) noted that older managers with better financial market understanding are less likely to seek external financing. Nevertheless, Biney (2018) and Peneder (2010) offer alternative perspectives on the relationship between owner age and venture capital financing.

The educational background of the SMI owner is another determinant. Those with higher education tend toward self-capital financing, contrary to Zhang's (2008) argument that better-educated entrepreneurs opt for formal financing. Sena et al. (2012) suggest a positive, albeit statistically insignificant, correlation between education and external financing.

Income levels of SMIs also influence their financing direction. Lower-income SMIs gravitate towards bank financing, contradicting Lofstrom et al.'s (2013) assertion that lower-income entrepreneurs typically receive less external financing.

Finally, the study touches upon innovation and internet use in SMIs. Less innovative SMIs favor self-capital, while more innovative ones are more likely to attract venture capital, resonating with Engel's (2002) findings and Peneder's (2010) concept of the positive selection effect by venture capitalists. Additionally, higher internet usage in SMI operations seems to favor bank financing.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study provides insightful conclusions regarding financing opportunities in Small and Medium Industries (SMIs). It reveals a clear correlation between the size of an SMI and its preferred financing source: smaller SMIs predominantly rely on internal capital. In contrast, larger ones are more inclined towards venture capital. The age of the SMI also plays a crucial role, with younger SMIs favoring bank financing and older ones gravitating towards venture capital. The business entity's status affects financing choices, too, with lower-status entities opting for self-financing and higher-status entities more likely to secure bank financing.

Additionally, the study finds that the age and educational background of the SMI owner influence financing decisions. Younger owners are inclined towards bank

financing, whereas older owners prefer self-financing. Owners with higher educational backgrounds tend towards self-financing, while those with less education explore other financing options. Income levels and innovation output of the SMIs also determine financing preferences. Lower income or innovation leads to a preference for self-financing, while higher levels in these areas attract venture capital. Moreover, increased internet usage in SMI operations is associated with a propensity towards bank financing.

The study indicates that educational background and SMI size are pivotal in determining the likelihood of obtaining self-financing or bank and other forms of financing, respectively.

Recommendations

Based on the findings of this study, a set of recommendations emerges, primarily aimed at guiding micro and small industries in Indonesia in their financing decisions. These industries must closely align their financing strategies with distinctive characteristics like size, age, owner's educational background, and innovation capacity. This alignment is crucial for selecting the most suitable financing source and potentially expanding, adjusting, or enhancing their business traits to access desired financing options. Furthermore, the study's insights offer valuable guidance to financial institutions, suggesting that they consider these specific characteristics when financing micro and small industries. This approach could lead to more targeted and effective financial support tailored to each industry's unique needs and potential.

Moreover, the implications of this study extend to the theoretical understanding of capital structure in small and medium enterprises. It substantiates the life cycle theory, demonstrating that companies in their nascent stages rely on internal funding before progressing to external sources as they grow and mature. This progression aligns with the company's development, experience, and increasing transparency, resonating with the viewpoints of Gregory et al. (2005). Additionally, the study supports the pecking order theory, which asserts that companies prioritize internal funding and gradually move to external sources like debt and equity as their needs evolve. The study enriches the current understanding of financing dynamics in small and medium enterprises by examining internal and external financing options, including specific forms such as venture capital.

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