The Determinant Factors of Micro, Small, and Medium Enterprises Towards Financing Source Decision

Azizah Davayudhanti, Asep Darmansyah and Acip Sutardi

School of Business and Management, Bandung Institute of Technology, Indonesia

Abstract. A country can be considered developing if the total number of entrepreneurs reaches 4% of the total population. Up until now, total number of entrepreneurs in Indonesia only reaches 3.31% of the total population and more than 99% of them are Micro, Small, and Medium enterprises while the rests are big corporations. SMEs give a significant contribution to the country's economies. They contributed 58.65% to the national gross domestic product and fashion industry is awarded as the second largest contribution to the national GDP. They contribute up to 166,135.30 million rupiah to the national gross domestic product. However, starting a new business is a difficult process, especially when it comes to financing constraints. Most SMEs have limited sources to run and scaling their business. This circumstance occurs because entrepreneurs do not really know what to be concerned in deciding the financing source for their business, while financial planning and management are the important things of survival for SMEs. Other than that, most entrepreneurs did less exploration about various financing sources. This research purposes is to examine the factors that influence SMEs’ intention to used internal or external financing source. This research also provides short explanation about various types of financing sources. There are two options for the financing sources in this research, either from internal or external. This research used quantitative approach by spreading a questionnaire to SMEs that run in fashion industry and domiciled in Jakarta and Bandung. Collected data was analyse using Ordinal Logistic Regression. From 192 respondents, the result of this research is that there are several factors that influence entrepreneurs’ intention to decide their financing source to run their business. Access to financing is significantly affects SMEs in deciding to use internal financing source, while gender is the only one that significantly influence SMEs in deciding to use external financing source. In conclusion, access to financing and gender are two significant factors that influence SMEs in making financing source decision.

Keywords: 1 SMEs · 2 Financial literacy · 3 Financial behaviour · 4 Access to financing · 5 Financing source decision

1. INTRODUCTION

According to World Bank standards, a country can be considered developing if the total number of entrepreneurs reach 4% of the total population, while the ratio of entrepreneurs in Indonesia only reaches 3.31% of total population (Richard, 2017). Indonesia became the fourth largest country in the world with an estimated total number of population is 268,722,947 (United Nations, 2019), means that Indonesia needs 1,854,189 more entrepreneurs to be identified as a well-developed country. Based on the Ministry of Cooperative and SMEs data, 99.99% of total entrepreneurs in Indonesia are small and medium enterprises and the rests or as much as 0.01% are big corporations.

E-mail address: azizahdava30@gmail.com

+ Corresponding author. Tel.: + (6281317661490)
Small, and Medium Enterprises or SMEs are commonly defined as formal enterprises (Ayyagari, Beck, and Demirguc-Kant, 2005). Central Bureau of Statistics as stated in Hendrawan (2012) classified small and medium-sized enterprises based on the number of paid employees. Small enterprises have less than 20 paid employees and medium-sized enterprises have 20-100 paid employees. While European Commission (2006) in Holatova and Brezinova (2013) has a different classification of SMEs number of employees.

SMEs give a significant contribution to the economies of Asia (Vandenbeng, Chantapacdepong, Yoshino, 2016). As one of Asia country, Indonesia has the same impact from SMEs. According to Badan Pusat Statistik, SMEs in Indonesia are always increase after the financial crisis in 1997-1998 and it can open job opportunities for 107 million workers until 2012. Besides contributes to open job opportunities, SMEs also contribute to national gross domestic product. Indonesia's gross domestic product is accounted to 1,015,539.02 million USD (World Bank, 2017) and SMEs contributed 58.65% to the national GDP or as much as 595,613.635 million USD (Ministry of Cooperative and SMEs, 2017).

In Indonesia, fashion industry contributes up to 166,135.30 million rupiahs in 2016 which make this industry as the second largest contribution to the national gross domestic product (Bekraf, 2016). Talking about fashion industry, Bandung is one of the most creative cities that created new fashion SMEs until Bandung is predicated as Paris van Java. However, build a new business is a difficult process, especially when it comes to funding and managing the fund. Abdulsaleh and Wothington (2013) stated that finance is a crucial thing to the continual of SMEs, their development growth and successfulness.

SMEs have different behaviors in managing their company's financial compared to big corporations, it depends on the entrepreneur's behavior and the SME's itself. Financial behavior can be determined as individual human behavior that relevant to the concept of money management include planning, managing, and controlling cash, credit, and savings (Xiao, 2008; Herawati, Candidia, Yadnyana, and Suharsono, 2013). Prior studies identified several factors towards SMEs financing source decision such as financial literacy, financial behavior, and access to financing (Lusardi & Mitchell, 2014; Xiao, 2008; Adore, 2016).

Since SMEs contribute significantly to economic growth and open job opportunities, they mostly encountered with financing constraints (Zhao, Wu, and Chen, 2006). As the major consideration in financing decision, entrepreneurs using different types of financing sources to fund their business (Staniewski, Szopinski, and Awruk, 2015), most common financing sources are from personal savings and loan from a lender or external financing (He & Baker, 2007). Types of external financing sources that common SMEs used are commercial banks, Islamic finance, venture capital, angel investor, and government (Ou & Haynes, 2006; Abdulsaleh & Wothington, 2013). In order to find the right financing source, this research purpose is to find out the factors that influence SMEs in deciding to use internal or external financing source.

2. LITERATURE REVIEW

Personal Factors

Cambridge dictionary defined personal as something that related and belongs to a single individual rather than to a group. Personal characteristics may lead to different financial decision in maintaining a business especially when making a decision. It also may affect a firm's performance and growth. To assist the impact, the factors that being test are gender, age, education, and experience (Abdulsaleh & Wothington, 2013; Cassar, 2004).

Verheul and Thurik (20010) stated that male and female entrepreneurs tend to have different capability in financing their business. Coleman and Cohn (2000) as stated in Cassar (2004) point
out that gender may influence start-up capital structure and financing. In parallel with Verheul and Thurik (2001) who proved that female entrepreneurs have a fewer amount of capital, a smaller proportion of equity, and a bigger proportion of bank loans.

Change of financial preference may occur according to the entrepreneur's age. Younger entrepreneurs have riskier financial behaviors rather than older entrepreneurs (Xiao, Chen, and Shun, 2014). It is consistent with Vos, Yeh, Carter, and Tagg (2007) that point out younger entrepreneurs are more likely to use external financing while older entrepreneurs are probably not like to use additional financing into their firms.

Coleman (2007) proved that entrepreneurs' educational background is positively related to business profitability and growth. In financing case, less educated entrepreneurs are more likely to use external financing while entrepreneurs with more education have less desire to use external financing to diminish the anxiety of loan denial (Vos, et al., 2007). In the other hand, experience also plays an important role. According to Nofsinger and Wang (2011), entrepreneurs' experience in the industry makes it easier to obtain external financing for the firms. It is consistent with Gompers, Kovner, Lerner, and Sharfstein (2010) research that found out the point of view of venture capital financing. They stated that entrepreneurs with more experiences are believed to have good performance persistence which makes that as the consideration factor of SMEs creditworthiness.

**Financial Literacy**

Financial literacy can be defined as an individual ability to get, understand, develop, and evaluate information about how money works include how to manage, earn, invest, and donate it (Giesler & Veresiu, 2014). In parallel, Danes and Haberman (2007) define financial literacy as an ability to make a financial decision by understanding the global financial impact. Individual's financial literacy may lead to greater financial behavior and financial decision making in developing world (Gutter, 2008; Cole, Simpson, & Zia, 2009; Herawati, et al., 2018). In accordance with Atkinton and Messy (2011) who said that financial literacy is significantly influence financial decion making, while lack of financial literacy may leads to difficulties in making financial decision (Lusardi, 2009). In Indonesia, according to Otoritas Jasa Keuangan Regulation No.1/2013 set about the necessity of financial institution to conduct and develop education in order to improve the population financial literacy (OJK, 2014). According to Lusardi and Mitchell (2014), the standard measurements for financial literacy are the understanding about working of interest rates, inflation effects, and the risk diversification concept.

**Financial Behavior**

Financial behavior can be defined as human behavior that related to the concept of money management include cash, credit, savings at individual level to planning, allocating, utilizing, and controlling (Xiao, 2008; Herawati, Candiasa, Yadnyana, & Suharsono, 2018).

**Access to Financing**

As a result of global financial crisis, access to financing become one of the main challenges for SMEs (Rupeika-Apoga, 2014). Adore (2016) did an assessment of the influence factors of access to financing for SMEs. Those factors are the firm's collateral, size and age of a firm, availability of information, education background of the owners, and firm's performance. There are several same factors in financial behavior and access to financing which may lead to the financing decision such as firm's collateral, size and age of a firm, and education background of the owners. According to Aldaba (2011), SMEs have limited access to financing due to the lack of available information regarding the firms' financial statement and business plan. By providing firms' financial statement, the lenders may know about the firms' profitability. It is in accordance with Martin (2010) as cited
in Adore (2016) who said firms’ performance can be measured with the change of their profitability, either it is decreased or increased. Other than those factors, there also some challenges in access to financing which may influence SMEs to decide their financing sources. Common challenges that occur are long process and bureaucracy, the amount required to be applied to get the fund, short time repayment period, high collateral, high interest rate, and absence of interest free loan providing institution (Adore, 2016).

**Financing Sources**

**Internal Financing Sources**

In the early stage of start-up, internal equity financing is the most used source which generally represented by the owner’s personal savings. Prior research stated equity financing is capital invested in the firm without exact repayment date where the supplier of equity capital is effectively investing in the business (Ou & Haynes, 2006). According to Abdulsaleh and Worthington (2013), internal equity financing is funds obtained from the firm’s owners, family, friends, or from the firm’s retained earnings.

**External Financing Sources**

**Commercial Banks**

In India, commercial banks are the main external financing source for small and medium enterprises (Baker, Kumar, & Rao 2017). Commercial banks provide various loans to make SMEs easier in financing their business. Short and long term loans as one type of bank loans are important in optimizing the capital structure of SMEs (Moro, Lucas, Grimm, & Grassi, 2010). Since commercial banks are formal external financing source, they have their own qualifications of SMEs that they want to give loans. Some SMEs have difficulties in obtaining loans from commercial banks because they did not meet the qualifications. The difficulties occur usually because the enterprises have lack of collateral, hard to prove the creditworthiness, weak relationship with the lenders, high transactions costs, limited cash flow, and the main obstacle is because of the asymmetries information between banks and the enterprises (Rupeika-Apoga, 2014; Zeneli & Zaho, 2014).

**Islamic Finance**

Islamic finance can be defined as the financing form that accordance with the Islamic or *Shariah* rules. Key principle in Islamic finance is the prohibition of *riba* or generally defined as interest, all transactions must be conducted through *al-bay* (exchange contract) or replaced the interest with profit-loss sharing principle (Aysan, Disli, & Ozturk, 2016; Leon & Weill, 2017). To execute that profit-loss sharing principle, there is two most commonly used method such as *Musharakah* and *Mudarabah* (Hussain, Shahmoradi, & Turk, 2015). *Musharakah* is a partnership form of some investors and the profits or losses are shared among all investors, while *Mudarabah* is a profit-loss contract between the borrower and the lender where the profits shared is according to the predetermined ratio and the losses borne completely by the lender (Beck, Demirguc-Kunt, & Merrouche, 2013).

**Venture Capital**

Karl Compton, president of Massachusetts Institute of Technology, and Georges F. Doriot, a Harvard University professor, established American Research and Development (ARD) in 1946 which is the very first venture capital firm (Gompers & Lerner, 2011). Venture capital is a form of
financing. As one of the financial intermediaries, venture capital specializes in financing business that in start-up and early-stage which have high growth opportunity and big earnings potential (Bottazzi & Rin, 2002; Caselli & Negri, 2018). According to Rossi (2015), venture capital plays a role in transforming research and development activities into products or services that can be commercialized, contributes in monitoring the company so that the company’s profits, earnings, and workforce quality will boost and assists company’s portfolio credibility to be given to the third parties.

Angel Investor

Benjamin and Sandles (1998) and Prowse (1998) as cited in Bottazzi and Rin (2001) stated that angel investor is a wealthy individual who invests directly in a private company. It is consistent with Irwin (2007) who said angel investors are individuals who invest in new and early-stage growth business. Since business plan is a crucial thing that being considers by investors in deciding whether or not to invest in a company, angel investors have different criteria in funding a business compared with other external financing sources. According to Mason and Stark (2004), angel investors give less emphasized to company’s financial condition, but they are more concern to the company’s target market to explore the potential of the business growth and the fulfilled of their expected return. In parallel with research in Taiwan which demonstrate angel investors’ perspective in deciding to invest in a company. The result is angel investors’ have prioritized some consideration that needs to be evaluated before investing in a company. Those priorities order are company’s creativity, marketability, trustworthiness, and passion (Ottavia, 2013).

Financing Decision

Financing decision was made by a firm relates to the decision of financing sources to be used to optimize the operation of the business (Katerega, Ngoma, Masaba, Nangoli, & Waswa, 2015). Katerega, et al. (2015) also stated that there are several studies towards Uganda’s SMEs whose proved that during the startup stage, a firm was obtained financing from internal and external financing sources, but most of them was used internal financing source especially personal savings.

3. METHODOLOGY

This research used a quantitative approach by spreading a questionnaire. The respondents are micro, small, and medium enterprises who run a business in fashion industry. Collected data will be analyze statistically using SPSS application. Total data is obtained from 192 people domiciled in Jakarta and Bandung, have a business in fashion industry.

Ordinal logistic regression used to analyze the relationship between the independent variables and ordinal type of dependent variable (Harrell, 2001). In this research, ordinal logistic regression used for analyze the relationship between financial literacy, financial behavior, and access to financing towards the intention to used internal or external financing source. P-value of each variable should be below 0.05 (p < 0.05) to be considered significantly affects the dependent variable (Norusis, 2010). The ordinal logistic model is:

\[ y = X \beta + \varepsilon \]

where,

\[ X = \text{independent variable} \]
4. RESULT AND DISCUSSION

Model Fitting Information

Table 1. Model Fitting Information

<table>
<thead>
<tr>
<th>Model</th>
<th>-2 Log Likelihood</th>
<th>Chi-Square</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internal</td>
<td>External</td>
<td>Internal</td>
<td>External</td>
</tr>
<tr>
<td>Intercept Only</td>
<td>522.183</td>
<td>662.476</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Final</td>
<td>484.299</td>
<td>647.793</td>
<td>37.884</td>
<td>14.683</td>
</tr>
</tbody>
</table>

From the table, the p-value of the intention to use internal financing source is .000 and the p-value of the intention to use external financing source is .040 which both of them are less than .05 which it is significant result. That both p-value indicate that the model fit the data.

Goodness-of-Fit

Table 2. Goodness-of-Fit

<table>
<thead>
<tr>
<th></th>
<th>Chi-Square</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internal</td>
<td>External</td>
<td>Internal</td>
</tr>
<tr>
<td>Pearson</td>
<td>1248.029</td>
<td>940.362</td>
<td>923</td>
</tr>
<tr>
<td>Deviance</td>
<td>480.140</td>
<td>640.861</td>
<td>923</td>
</tr>
</tbody>
</table>

The significant result is if the one of the p-value is greater than 0.05 (p-value > 0.05). From the table above, the

**Pseudo R-Square**
Pseudo $R$-squared value is not found in ordinal logistic regression. But, from the middle value of the table above, the model explained 19.1% of the variance in the internal financing source decision and 7.6% of the variance in the external financing source decision.

### Test of Parallel Lines

Table 4. Test of Parallel Lines

<table>
<thead>
<tr>
<th>Model</th>
<th>-2 Log Likelihood</th>
<th>Chi-Square</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internal</td>
<td>External</td>
<td>Internal</td>
<td>External</td>
</tr>
<tr>
<td>Null Hypothesis</td>
<td>484.299</td>
<td>647.793</td>
<td>15.522</td>
<td>35.164</td>
</tr>
<tr>
<td>General</td>
<td>468.777</td>
<td>612.629</td>
<td>.000</td>
<td>.620</td>
</tr>
</tbody>
</table>

The test of parallel line table explained the assumption of proportional odds. The statistical result for internal financing source is .972 and for external financing source is .165 which both of them are greater than 0.05 (> 0.05). This means the result is statistically significant.

### Parameter Estimates

Table 5. Parameter Estimates

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimate</th>
<th>p-value</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Internal</td>
<td>External</td>
<td>Internal</td>
</tr>
<tr>
<td>Financial Literacy</td>
<td>.135</td>
<td>.112</td>
<td>.352</td>
</tr>
<tr>
<td>Financial Behavior</td>
<td>-.001</td>
<td>.027</td>
<td>.970</td>
</tr>
<tr>
<td>Access to Financing</td>
<td>.196</td>
<td>.018</td>
<td>.000</td>
</tr>
<tr>
<td>Gender</td>
<td>-.092</td>
<td>.288</td>
<td>.846</td>
</tr>
<tr>
<td>Age</td>
<td>-.249</td>
<td>.159</td>
<td>.441</td>
</tr>
</tbody>
</table>
In the parameter estimate table, the result that needs to be interpreted is the Sig. or p-value column. Independents variable that significantly affect the dependent variable are they who have p-value less than 0.05 (< 0.05). As shown in the table above, there is only one variable that significantly affects SMEs’ intention to use internal financing source, that is access to financing that have p-value .000 which less than .05. On the other hand, there is also only one independent variable that significantly affects SMEs’ intention to use external financing source that is gender with .002 p-value which is less than .05.

5. CONCLUSION

In conclusion, the result of this research is that the factors that significantly influence the intention of SMEs in deciding their financing source to maintaining and developing their business are access to financing and gender. The recommendation that authors give is that micro, small, and medium enterprises should consider about their availability of financial report, their business plan, and their business’s profitability since those are things that including in access to financing. For future research, it can be conducted to research the micro, small, and medium enterprises that running in another several industries and do the research nationally. Also, added more variables that might be influencing the financing source decision.

6. ACKNOWLEDGEMENTS

Researcher meant to expresses the gratitude to:

- Researcher’s parent who always support and pray for the best
- Asep Darmansyah and Acip Sutardi as the supervisor in finishing this research
- All respondents who voluntary fill the research’s questionnaire

REFERENCES


619


