

A Structural Relationship of Entrepreneurial Orientation and Innovation through Supply Chain Management on Competitive Advantage of SMEs in North Sumatera, Indonesia: The Mediating Role of Financing Factor

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Abstract— The complexity of economic activities, employment opportunities and significant contribution to the country generated through an instrument of entrepreneurial growth, namely Small and Medium Enterprises (SMEs). The primary objectives of this study are to examine the relationship of entrepreneurial orientation and innovation through supply chain management on competitive advantage and the role of financing factor as mediating variable in the relationship of entrepreneurial orientation and innovation on the competitive advantage of SMEs in North Sumatera, Indonesia. This study used a quantitative descriptive approach. A total of 300 respondents participated in this study. The data collected using random sampling technique and analyzed using the structural equation modelling (SEM) by assisting the statistical software, namely IBM AMOS-25. The results of the study show that entrepreneurial orientation and innovation have a significantly positive relationship on competitive advantages. Also, the financing factor mediates the relationship between entrepreneurial orientation and innovation on competitive advantages.

Keywords— Entrepreneurial orientation, innovation, competitive advantage, Small Medium Enterprises (SMEs), Structural Equation Modelling (SEM).

1. Introduction

Diversity of economic activities, employment opportunities and substantial contribution to the country will be produced by an entrepreneurial development instrument called SMEs. SMEs need the ability to compete in the market, facing various challenges to maintain business continuity in the

future. [1] stated that Indonesian SMEs face many obstacles, the SMEs located in big cities. They face harder competition without access to bank or institutional loans in government finance. They have to seek their financing through loans, informal businesses and face other problems such as high rates of return demanded by informal lending institutions. Supported by [2], the reasons that constrain SMEs in developing countries are the separation of market access for SMEs; information; finance; and government support.

SMEs have to explore contemporary knowledge. Competitive advantage can succeed SMEs through innovation in marketing and entrepreneurial activities [3],[4]. It includes enthusiasm to innovate to refresh market offerings, take risks by trying to bring out uncertain products, services, and markets, and be more proactive than competitors against new market opportunities [5]. The nature of entrepreneurial orientation is highly emphasized on the enthusiasm of organizations to innovate in organizations [6]. The entrepreneurial orientation has defined as autonomy, innovation, proactivity, competitive aggressiveness, and risk-taking. Also, three-dimension such as innovation, proactivity, and risk-taking have been adopted most often in defining entrepreneurial orientation [7]. Innovative means organizations want to pursue new ideas and concepts in the process, product, or service development. Recently, entrepreneurial orientation has seen as a strategic approach in the decision-

making process as well as a means to explain company performance [8]. It means highly strategic reactivity companies tend to pursue, identify, create and launch new business opportunities and strategic renewals to maintain a competitive advantage. Thus, the purpose of this study to examine the relationship of entrepreneurial orientation and innovation through supply chain management on competitive advantage and the role of financing factor as mediating variable in the relationship of entrepreneurial orientation and innovation on the competitive advantage of SMEs in North Sumatera, Indonesia. It aims to prove that business financing can play a role as a mediating variable which mediates the relationship of entrepreneurial orientation and innovation and business competitive advantage.

2. Review of Related Literature

2.1 Entrepreneurship Orientation

The dimensions of the entrepreneurial orientation process are the same basic dimensions as the strategy-making process. The existence of entrepreneurial management concepts that describe organizational procedures and methods and forms used by several companies as entrepreneurs are parts of the specific dimensions of entrepreneurial orientation [9]. [10] stated that a company that has an entrepreneurial orientation is brave in taking risks, as a pioneer in product innovation, and being proactive in innovation. Entrepreneurial orientation defined as the processes, practices and activities that use innovation, risk-taking and active efforts to win the competition.

2.2 Innovation

Innovation is a procedure for a company to be able to adapt to a dynamic environment. Company is required to be able to create a variety of new assessments and ideas and offer innovative products to improve service performance providing satisfaction to customers. Innovation used as a way to build and develop organizations through the achievement and introduction of new technologies, new applications in various forms of new products so that it becomes a combination of various innovations that shape the arena of innovation [11].

Sustainability of an innovation carried out by a company is a fundamental need that will create a competitive advantage. Innovation is an important function of company management because innovation helps determine superior business performance. Innovation is more important as a strategy for the survival of a business, not only a matter of growth but also to succeed in increasingly

intense competition and environmental uncertainty [12].

2.3 Business Financing

Financing is funding received from a party originating from the provision of funds to support planned investments, both independent and institutional [13]. Financing is useful as initial or additional capital for business development, in the form of adding merchandise or expanding businesses [14].

Funding is an activity that dominates the allocation of bank funds [15]. Funds used in financing disbursements reach 70% to 80% of the bank's business volume. The primary source of bank income comes from financing distribution activities carried out by banks in the form of profit-sharing, mark up or rental income. [16] mentions the acquisition of income from this financing is expected to be better bank profitability which is reflected in the increase in bank profits.

2.4 Competitive Advantage

Competitive advantage is a profit strategy of a company that collaborates to be more competitive in the market. The strategy designed to achieve a competitive advantage must continue to be done to become a market leader [11] successfully. The company's success in achieving a competitive advantage is when there are various actions of companies in the industry/market to create economic value with the involvement of several companies that make the same efforts [17]. [18] stated that competitive advantage is the advantage over competitors achieved by offering more values to consumers than the values given by competitors. Expectations to be achieved through competitive advantage are that the companies can achieve profits on target, an increase in market share and customer satisfaction, and long-term business sustainability [19]. The conceptual framework in this study, as presented in Figure 1 below:

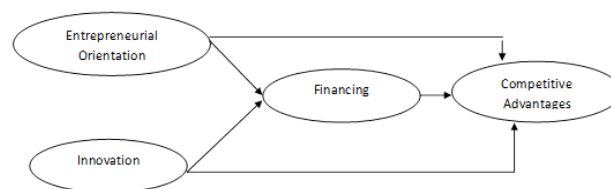


Figure 1. Research Conceptual Framework

The hypotheses proposed in this study are as follows:

H1a: Entrepreneurial orientation and Innovation have a significant positive relationship on competitive advantage

H2a: The financing factor mediates the relationship of entrepreneurial orientation and innovation on competitive advantage

3. Methodology

This study used quantitative and explanatory descriptive analysis. This study explained the relationship of variables and various backgrounds affecting the relationship among variables. This study used primary data of interviews and respondents' answers to some questions and statements submitted in the research questionnaire. Meanwhile, the secondary data of documentation used as a source of information in supporting primary data and research results.

The population in this study included all SMEs in North Sumatra that got funding from the Bank Sumatera Utara and were in the category of current financing during the 2015-2019 period. The number of samples was determined using the provisions of the Chi-Square testing criteria in the Structural Equation Model (SEM) between 100-300 samples for the maximum likelihood estimation technique so that there were only 300 respondents. All data were processed through Structural Equation Model (SEM) analysis technique using AMOS software, and descriptive statistical analysis technique was to describe the respondent profile using SPSS.

4. Results

4.1. Characteristics of Respondents

The results of the descriptive statistical analysis present respondents' information based on several criteria, namely: age, sex, education, line of business, length of the business carried out, total assets owned, whether self-owned business or not, and whether doing innovation or not. SMEs in North Sumatra selected as respondents in this study dominated by businesspeople aged 35-55 years (65%). They are in productive age and able to run businesses, achieve competitive advantages, and have business sustainability in the future.

For education criteria, it is known that respondents are business actors dominated by individuals graduating from high school (70%), bachelor (25%) and have no educational background (5%). It indicates that business operators in North Sumatra are business people with limited knowledge and skills in which they run their business based on their experiences and needs.

The SMEs business sectors in North Sumatra

home is home-based industry such as food processing and selling basic necessities in the residential environment (75%), followed with manufacturing industry businesses (20%) such as workshops, sewing clothes, convection, selling furniture, trading businesses (5%), and service businesses (5%). Based on the length of business, it is known that most of them have run business for over three years, i.e. 70%, while the rest are between 1-3 years (30%).

Based on the asset profile owned, it is known that 80% of the respondents had small assets, i.e. under 50 million, followed with 10% of the respondents having assets of 50 million to 200 million, and 10% of the respondents having above 200 million. This condition illustrates that the majority of business operators in North Sumatra who were the respondents of this study run home industry in the vicinity of their home environment and are small industries that have not developed significantly and are still low in competitive advantage capacity.

Table 1. Regression Weight of Correlation Test among Variables

Path Analysis		Estimate	P-Value
Entrepreneurial Orientation	→ Business Financing	0.650	0.047
Innovation	→ Business Financing	0.314	0.005
Entrepreneurial Orientation	→ Competitive Advantages	0.717	0.000
Innovation	→ Competitive Advantages	0.306	0.050
Business Financing	→ Competitive Advantages	0.109	0.034

Other information obtained based on the business ownership profile is known that 100% is a self-owned business. Based on the results of interviews with respondents, it is known that to get financial support from the bank, those who would be given funding assistance must be a self-owned business and guarantees that were wholly owned by the business actors as a requirement from the bank. Another profile of business actors was known that the majority of home industry business actors had not yet innovated or did not understand the innovation they must do to increase sales of products/services offered to consumers. Therefore, their orientation was only at the level of sales and targeted profits to increase and did not really understand the competitive advantage that must be obtained for business continuity. It was also influenced by the lack of knowledge and skills due to the level of education possessed by business actors.

4.2. Results of Data Analysis

The Full Model Structural Equation Model test results obtained correlation test results between variables to prove the hypothesis proposed in this study:

Direct and indirect correlation test results are to prove the financing variable as an intervening variable that mediates the correlation of entrepreneurial orientation and innovation on competitive advantage. The results of the analysis obtained in the Structural Equation Modelling (SEM) analysis can be seen in Table 2 and Table 3 below

Table 2. The Result of Direct Correlation among Variables

	Entrepreneurial orientation	Innovation	Financing
Financing	0.065	0.314	0.000
Competitive advantages	0.717	0.306	0.109

Table 3. The Result of Indirect Correlation among Variables

	Entrepreneurial orientation	Innovation	Financing
Financing	0.000	0.000	0.000
Competitive advantages	0.720	0.411	0.085

The following results of data analysis are used to answer the hypotheses in this study using output regression weight, namely: (i) Entrepreneurial orientation showed a significant positive correlation to business financing with a p-value of 0.047 and an estimated effect value of 0.065. Thus, hypothesis 1 in this study was accepted. (ii) Innovation showed a significant positive correlation to business financing with a p-value of 0.005 and an estimated effect value of 0.314. Thus, hypothesis 2 in this study was accepted. (iii) Entrepreneurial orientation showed a significant positive correlation to competitive advantage with a p-value of 0,000 and an estimated effect value of 0.717. Thus, hypothesis 3 in this study was accepted. (iv) Innovation showed a significant positive correlation to competitive advantage with a p-value of 0.050 and an estimated effect value of 0.306. Thus, hypothesis 4 in this study was accepted.

Financing showed a significant positive correlation to competitive advantage with a p-value of 0.034 and an estimated effect value of 0.109.

Thus, hypothesis 5 in this study was accepted

5. Discussion

Entrepreneurial orientation was proven to have a significant positive correlation to the business financing and competitive advantages for SMEs in North Sumatra. These results provide information that entrepreneurship orientation is the most effective strategy for a business to be able to compete effectively in the same market while offering the same products. Entrepreneurial orientation is a factor that gives a real and strong influence on business financing and competitive advantage. With a positive relationship, It means that when business people have a better entrepreneurial orientation, it will have an impact on better business financing and provide the ability for businesses to be better in competitive advantage in the market. This entrepreneurial orientation includes a process, practice and decision that will lead to a new input process with three aspects of entrepreneurship such as innovation, proactivity and risk-taking [20]. Therefore, the results of this study are in line with [20] stating that entrepreneurial orientation is capable of giving birth to innovations that make companies have effective and courageous strategies in taking risks to achieve competitive advantages. [21] also mentioned that entrepreneurial orientation as a managerial behaviour that supports the export process through learning and innovation so that it can improve export performance.

Innovation has a positive and significant correlation to financing and competitive advantage. It was proven that the innovations carried out by SME entrepreneurs in North Sumatra is a part of entrepreneurial orientations which is able to strongly and significantly influence business financing and competitive advantage. A positive correlation illustrates that business actors who are able to innovate as part of a business strategy will increasingly provide positive opportunities and the better to be able to be given financial assistance by the banks and the greater the opportunity to gain a competitive advantage in the market. This innovation effort has close links with an entrepreneurial orientation that is considered capable of striving for business in achieving competitive advantage. There is an opinion stating that entrepreneurial orientation can increase exports by learning about organizational mix and innovating so that later it will increase product exports as a competitive advantage. It can be concluded that there is a correlation between innovation and entrepreneurial orientation and competitive advantage [22],[23],[24]. [25].

Innovation is one of the success indicators in

implementing new ideas. In addition, it is considered capable of supporting the achievement of maximum business performance. Several studies state that entrepreneurship is an activity of innovation and innovation increases export performance because it is considered superior in the competition [21]. Competitive advantage is a solution for an effort to conduct a strategy in leading and showing its best performance against competitors in the same industry [26]. The strategy undertaken is part of entrepreneurial orientation and innovation to increase company value [27].

Funding showed a significant positive correlation to the competitive advantage of SMEs entrepreneurs in North Sumatra. The financial support from bank financial institutions would help SMEs develop their businesses. The financial assistance provided would be an opportunity and support for businesses to innovate as part of an entrepreneurial orientation strategy and achieve competitive advantage and demonstrating product superiority against competitors in the same industry.

Financing is proven to be able to significantly and strongly influence competitive advantage with a positive correlation meaning that the better the financing received by business actors, the better it will help SMEs achieve their competitive advantage. [28] stated that financing is a facility that becomes effective if SMEs have the internal capability to be able to utilize these external facilities well, one of which is the internal ability to carry out an entrepreneurial orientation strategy to innovate. It is in line with [27] stated that financing is an important factor and supports competitive advantage. As an effort to maintain and develop a business, the entrepreneur and the government must support each other to contribute in venture capital investment support and issue regulations supporting business development [29].

Financing is proven to be an intervening variable that mediates the correlation of entrepreneurial orientation and innovation to a competitive advantage. Financing is a program that directly provides and provides sustainable business growth capabilities. The business credit, financial assistance, training and technical efforts related to business innovation, services, infrastructure support will help strengthen businesses and make businesses able to compete in the market [27],[30].

6. Conclusion and Suggestion

6.1. Conclusion

The correlation of entrepreneurial entrepreneurs and innovation to the competitive advantage of SMEs in North Sumatra tend to create businesses

that follow the current market trends; however, when the trend is no longer booming, they will replace it with the new ones. Various innovations created by businesspeople are not only innovations on the menus offered but also the packaging design. One type of partner support obtained by business people in North Sumatra is the presence of Go-Food services offered by the Go-Jek application that provides many benefits. In this case, the ease in ordering food offered to consumer's increases demands.

The conclusions that obtained in this study are as follows: (i) Entrepreneurial orientation had a significant positive correlation to financing and the competitive advantage of SME businesses in North Sumatra. (ii) Innovation had a significant positive correlation to financing and the competitive advantage of SME businesses in North Sumatra. (iii) The financing had a significant positive correlation to the competitive advantage of SME businesses in North Sumatra. (iv) Financing was proven to play a role as an intervening variable that mediates the correlation of entrepreneurial orientation and innovation to the competitive advantage of SME businesses in North Sumatra. (v) The education level of SMEs, i.e. high school, was the cause of the limited ability and expertise of business actors to develop their business; thus, it inhibited a competitive advantage. (vi) Low education level was also the cause of the lack of business/product innovation undertaken by SME entrepreneurs in North Sumatra; thus, it hampered financing/investment opportunities for business development and making businesses fail to achieve competitive advantage.

6.2 Suggestion

From the results of this study, we have several recommendations which are: (i) SME practitioners need to get training and guidance in developing their business through a strategy to make various efforts to innovate products/businesses to achieve competitive advantages. (ii) The businessmen must be getting support from governments/ policymakers and investors. So that, the SMEs in North Sumatra are well acquainted with the business sector they run, able to read business opportunities, able to determine business development strategies to make appropriate decisions as part of entrepreneurial orientation they have. (iii) Business actors must know the business risks they face as part of the primary function of entrepreneurial orientation because it will enable entrepreneurs to innovate in creating products that are unique and more attractive than their competitors as the ability to

achieve competitive advantages. (iv) Business actors must be customer-oriented to gain a competitive advantage that enables them to meet the needs and desires of consumers. (v) Banks must be more proactive in educating SMEs in North Sumatra related to the right type of financing and investment procedures to be able to benefit appropriately for entrepreneurs to develop their businesses. (vii) For further researchers, it is recommended to combine other factors known to be able to influence the competitive advantage of a business.

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