The Government Support Model on the Development of SMEs in West Sumatera Province. Indonesia

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Abstract. Small and Medium Enterprises is one of the priorities in economic development in Indonesia. West Sumatra has areas with unique creative industries based on livestock production. The development of the creative industry which has high additional value to product prices needs greater attention so that it can grow. The SMEs that are the focus are those based on creative industries, there are culinary SMEs made from beef and poultry products. This study aimed to develop a government support model to determine the factors that influence the development of SMEs, so that the factors that influence the development of SMEs can be identified. The analysis method used was partial least square-structural equation modeling (PLS-SEM). The findings of this study are government policies have a direct influence on the internal factors of SMEs, but do not have a direct effect on SMEs' performance. More intensive and more focused policies are still needed to improve the performance of SMEs.

Keywords: SMEs; External Factors; Internal Factors; Structural Equation Modeling

1. Introduction

The economic crisis due to Covid-19 pandemic has affected the sustainability of micro, small and medium enterprises (MSMEs). Data from the Ministry of Cooperatives and SMEs stated that at least 37 thousand MSME actors were hit during the pandemic, although MSMEs are the main driver of the Indonesian economy. In 2018, this sector contributed 60.34% to the gross domestic product (GDP). These various MSMEs are able to assist government programs in poverty alleviation through job creation [1]. Cooperation between the government, banking sector, cooperatives and related agencies needs to be done to help the growth of micro, small and medium enterprises, since MSMEs have proven to be more resilient than medium or large scale businesses that have stagnated and even stopped their activities [2].

SMEs that carry out the processing of livestock products are the most developed business. The existence of 19,245 SMEs in Payakumbuh City and 48,923 SMEs in Limapuluh Kota District play a very important role in providing employment. These two regions have superior products such as creative culinary industries made from livestock products such as beef rendang, dry rendang, wet rendang, egg rendang, chicken rendang, dried jerky and wet jerky, pulmonary jerky, green chili duck curry, skin crackers, dairy products such as curds and kefir, and many more. However, in its development, it is still constrained by internal factors such as lack of capital, low human resource capabilities and mastery of technology. Meanwhile, the external constraints include market conditions during pandemic, low market
absorption of production results due to social distancing and constraints in mastering digital technology in marketing products. Furthermore, the problems that arise from the internal of each SMEs is more specific at the level of skills and human resources who are not yet competent. According to [3], the development of MSMEs is influenced by many factors, but the most influential factors are government support, financial access, technology used, marketing, managerial skills and education for business owners to manage and run a business. Another obstacle is the relatively low labor productivity, low additional value and limited market share which is limited only in the country. Apart from that, it was also found that there were distorted market mechanisms, including regulations and fees that have a weak legal basis and less transparent licensing process, as well as weak coordination between agencies/institutions that developed SME development programs. This situation causes SMEs to bear large transaction costs.

There are several aspects that influence the development of SMEs. These aspects include: Socio-cultural aspect, human resources aspect, financial aspect and limited capital. In the Production Aspect, the mastery of production technology is still weak due to the limited ability to provide production tools. In the marketing aspect, choosing the right marketing channel will contribute significantly to the development of SMEs, as well as regulatory aspects. The government must play an active role in formulating regulations that facilitate the existence and development of these SMEs. Indicators that show the development of SMEs are: growth in net profit, time needed to break even, considerations in successful business, and considering developing businesses [3]. Meanwhile, according to [4] and [5], government support focuses on creating profitable policies, easiness in obtaining business licenses, and funding schemes from the government.

The purpose of this study was to analyze the development of SMEs in Payakumbuh City and Limapuluh Kota District, to make a development model through SEM model and to analyze the role of government in the development of SMEs. The results of this study are expected to contribute to the theoretical thinking in the development of SMEs, especially the business of processing livestock products and become a reference for further research. In practical terms, we obtained an overview of developments and the obstacles faced by MSMEs. The results of this study are also expected to provide recommendations for policy makers regarding the problems faced by SMEs, especially in capital aspect.

2. Materials and Methods

According to [6], each stage of a company's growth is the result of two environments in which the company does business, those are the internal and external environment. This study aimed to determine the variables from external and internal factors that affect the performance of SMEs. Especially SMEs that process livestock products to improve quality, market orientation and business performance. This study focused on analyzing the relationship between external and internal factors in their influence on business performance using Partial Least Squares Structural Equation Modeling (PLS-SEM) method. The research used survey method with a quota of 40 respondents in Limapuluh Kota Districtand Payakumbuh City, conducted from June to August 2020. Respondents were selected purposively, specifically for SMEs who process livestock products. Such as rendang, skin cracker, and frozen food processing SMEs. The research variables used were external factors (X) including aspects of government policy (X1), socio-cultural and economic (X2), of the role of related institutions (X3) and internal factors (Y) which include aspects of human resources (Y1) financial. (Y2), production technology(Y3), market and marketing (Y4) as well as SME performance (Z).

3. Result and Discussion

3.1 Overview of Research Objects

Payakumbuh City and Limapuluh Kota Districtare livestock centers for both ruminants and poultry in West Sumatra. Payakumbuh is a medium plain area with an altitude of ± 514 meters above sea level. The distance between Payakumbuh City andPadang City as the provincial capital is around 120 km. Payakumbuh is a city located on the inter-provincial traffic lane which is the strength of this city. Limapuluh Kota Districtis also located at the crossroads of West Sumatra and Riau mainland provinces.
These two areas are tourist areas in West Sumatra. Tourism is very closely related to culinary, so that these two areas have a lot of SMEs engaged in the culinary sector. Rendang is an authentic Minangkabau dish which is very popular with both domestic and foreign tourists. Based on the results of the survey that has been conducted, there were as many as 40 SMEs engaged in the processing of livestock products as respondents.

The profile of business actors is in the age range of 19 - 70 years old, in which mostly are aged 30-53 years old by 45%, 19-29 years old by 25%, and over 53 years old by 30%. The average education level of them is Senior High School by 63%, Junior High School by 12% and Elementary School by 25%. The length of time working in SMEs for processed livestock products is 5 - 10 years, while based on gender, 70% are female.

3.2 Government Support Model for the development of SMEs for processing livestock products.
Partial Least Square analysis used in this paper was to measure the influence of government support for the performance of SMEs. Partial Least Square is a multivariable analysis technique that can be used to describe the simultaneous linear relationship of the observed variables, which also involves latent variables that cannot be measured directly. The PLS function is to test whether the model used is suitable or not. Model fit is measured by two criteria, those are the outer model and the inner model. Outer model is used to test the validity and reliability, while inner model is used to assess the influence of one variable to another in the research model. Data analysis using SmartPLS 2.0 provides the results depicted in Figure 1.

![Figure 1. Full Structural Model Output using SmartPLS 2.0](image)

3.2.1 Outer Model
Outer model is a measurement model that shows the relationship between indicators and their latent variables. To be able to see whether there is a relationship between indicators and their latent variables, we must first test the validity of the questionnaire used to collect data in the field. A questionnaire is considered to be valid if the questions on the questionnaire are able to answer the research objectives being modeled. According to [7], the outer model is seen through the convergent value of validity, discriminant validity and composite validity. Based on Figure 1, the results of the calculation of the validity test of all indicators (questions) on the variables entered into the model have a cross loading value of > 0.5. So, it can be considered that all indicator questions in this study have met the requirements.
and are declared valid. Meanwhile, to measure whether the questionnaire used is a reliable (consistent), a reliability test is used. The results of the reliability test are presented in Table 1.

| Variable                | Cronbach's Alpha | rho_A  | Composite Reliability | Average Variance Extracted (AVE) |
|-------------------------|------------------|--------|------------------------|----------------------------------|
| Policy                  | 0.888            | 0.970  | 0.899                  | 0.598                            |
| Finance                 | 0.821            | 0.852  | 0.879                  | 0.647                            |
| Performance             | 0.941            | 0.946  | 0.955                  | 0.810                            |
| Marketing               | 0.837            | 0.859  | 0.890                  | 0.669                            |
| Role of Institutions    | 0.870            | 0.891  | 0.911                  | 0.719                            |
| HR                      | 0.875            | 0.901  | 0.915                  | 0.730                            |
| Socio-cultural          | 0.856            | 0.870  | 0.902                  | 0.698                            |
| Production Technology   | 0.793            | 0.802  | 0.839                  | 0.515                            |

**Source:** SEM-PLS output

Table 1 shows that the questionnaire used was reliable and has met the requirements of both discriminant validity and composite reliability analysis, including; Average Variance Extracted (AVE) value > 0.50; Composite Reliability value > 0.70; and Cronbach's Alpha value > 0.60. Based on Table 1, it can be seen that the Average Variance Extracted (AVE) value was > 0.50. All Composite Reliability scores obtained result > 0.70 and all Cronbach's Alpha scores were more than 0.60.

### 3.2.2 Inner Model

Structural testing in PLS was evaluated using the R square for the dependent variable indicated by the t-value and path coefficient, whether it has a substantive effect [7]. The path-coefficient value for the independent variable was then assessed for its significance based on the t-statistic value for each path. The structural model of this study is shown in Figure 2.

![Figure 2. Standardized model](image)

Based on Figure 2, the model that is formed is written with the following equation:

1. \( Y = 0.603 \times X2 + 0.017 \times X3 + 0.218 \times X4 + 0.119 \times X5 + 0.271 \times X6 + 0.101 \times X7 \) (\( Y \) = SMEs Performance)
This equation shows that the performance of SMEs is influenced by financial (X2), marketing (X3), the role of institutions (X4), human resource (X%), socio-cultural factors (X6), and production technology(X7) collectively by 75.2%, while the rest is influenced by other factors which are not examined in this research. It means that the internal factors and external factors simultaneously play a role in improving the performance of SMEs. Therefore, the government should focus more on providing support on factors that empirically improve the performance of SMEs. According to [8] said that a business is unable to reach the growth stage in its business life cycle from a financial perspective, generally due to the lack of financial access. This inability causes the growth rate of SMEs to decline and does not have the advantage of competitiveness.

2. Policies (X1)
Indonesian government has provided support for the development of SMEs with policies (X1), including access to finance, marketing promotions, increasing workforce skills and training in production techniques. However, it is also necessary to simultaneously support external factors, because external factors simultaneously play a very important role in improving the performance of SMEs. Therefore, the government should focus more on providing support on factors that empirically improve the performance of SMEs.

3. Finance aspect (X2) = 0.453X1
The financial aspect is influenced by government policy by 20.5% (R square = 0.205) and the path coefficient of +0.453. This implies that government support in providing financial assistance of Rp1,000,000 can increase the performance of SMEs by Rp453,000. This is in line with what [9] stated that there is a positive and significant moderating effect of financial literacy in the relationship between access to finance and the growth of SMEs in developing countries. In addition, financial literacy and access to finance also have significant and positive influence on the growth of SMEs in developing countries.

4. Marketing (X3) = 0.007X1
The marketing aspect has an R square of 0.007, which indicates the magnitude of the influence of government policies on the marketing system of 0.7%. The coefficient of the marketing system path is +0.082 which indicates a unidirectional relationship, meaning that if government support for the marketing variable increases by 1 unit, the performance of SMEs will increase by 0.082. The results of research by [10] found that government policy is considered as an important contingency variable, because it can improve market practice as a source of competitive advantage that tends to improve the financial performance of SMEs.

5. Human resources(X4) = 0.275 X1
Human resources have an R square value of 0.075, meaning that government support in the form of training has an effect of 7.5%, with a path coefficient of +0.275. It indicates that an increase in the training frequency by 1 unit will increase the ability of human resources by 0.275. In accordance with [11] research, government policies for human resource development through European Social Fund (ESF) funding can improve employees’ skills, increase work efficiency and strengthen company competitive advantage. In addition, HRD practices can have a positive influence on the SMEs, particularly on the aspects of worker motivation and job satisfaction [12]; [13]

6. Production Technology(X5) = 0.343 X1
The R-square value of production technology is 0.118, which means that government support in the form of production equipment has an effect of 11.8%, while the path coefficient is +0.343 meaning that there is a unidirectional relationship. The increase
of support by one unit means that the level of utilization of production technology will increase by 0.343 units. According to [14], capital, education and technologies used have a significant effect on the revenue of SMEs, in which the more advanced technologies are adopted, the greater the income received by SMEs in the area of Iman Bonjol, West Denpasar.

7. Role of related Institution (X6)
8. Socio-culture (X7)

3.3 Partial hypothesis test
To see the effect of the independent variable on the dependent variable, partial hypothesis testing was used. Ho: there is no influence of independent variables on the dependent variable, Ha: there is influence of independent variables on the dependent variable. Test criteria: - Ho is rejected if t statistic > 1.96 - Ho is accepted if t statistic < 1.96.

To assess the significance of predictive models in testing the structural models, it can be seen from the t-statistic between the independent variables to the dependent variable in the path coefficient table taken from Figure 2.

Table 3. Path Coefficients (Mean, STDEV, T-Values)

| No | Original Sample (O) | T Statistics (O/STDEV) | P Values |
|----|---------------------|------------------------|----------|
| 1  | Policies ->Finance  | 0.453                  | 5.153    | 0.000    |
| 2  | Policies ->Marketing| 0.082                  | 0.606    | 0.545    |
| 3  | Policies ->Human resources | 0.275          | 2.000    | 0.046    |
| 4  | Policies ->Production Technologies | 0.343     | 2.819    | 0.005    |
| 5  | Finance ->Performance | 0.603           | 3.447    | 0.001    |
| 6  | Marketing->Performance | 0.017          | 0.104    | 0.917    |
| 7  | Institution role ->Performance | 0.218       | 1.974    | 0.049    |
| 8  | Human Resource ->Performance | 0.119       | 0.761    | 0.447    |
| 9  | Socio-culture ->Performance | 0.271       | 2.214    | 0.027    |
| 10 | Production Technique ->Performance | -0.101      | 0.685    | 0.494    |

Source: Results of SEM-PLS data processing

Based on Table 3, it can be concluded as follows:
1. Influence of internal factors
In regression relation to financial policy, policy variable has t-statistic value of 5.153 with p-value of 0.000, indicating policies significantly influence the financial condition of SMEs. Meanwhile, the finance variable has t-statistic value of 3.447 > 1.96 with p-value of 0.001 < 0.05 indicating that the financial variable has a significant effect on performance. In the marketing variable, policy has no significant influence because it has a statistical t-value of 0.606 < 1.96 with a p-value of 0.545 > 0, likewise the marketing variable has no significant effect on performance because the t-statistical value is 0.104 > 0.05 and p-value of 0.917 > 1.96. The government policy to provide trainings for SMEs has significant effect because it has statistical t-value of 2.000 > 1.96 and p-value of 0.046 < 0.05. However, the human resource variable does not have a significant effect on SME performance because the t-statistical value is 0.761 < 1.96 and the p-value is 0.447 > 0.05. Production technology variables are significantly influenced by policy support equipment because it has t statistic value of 2.819 > 1.96 with a p-value of 0.005 < 0.05, but the support does not give significant influence on the performance because the t statistic value is 0.685 < 1.96 and the p-value is 0.494 > 0.05.

Based on the statistical analysis above, it is concluded that government policy affects each internal factor, but only financial factor has a significant influence on the performance of SMEs. Government policies have an indirect significant effect on the performance of SMEs, but through internal financial factors.
2. Influence of external factors
External factors that have been identified based on the results of previous studies, namely the role of related institutions, have a significant direct effect on SME performance seeing the t statistical value which is 1.974 > 1.96 and the p value of 0.049 < 0.05. Likewise, local socio-cultural factor also has a significant direct influence on the performance of SMEs with a t statistic value of 2.214 > 1.96 and a p value of 0.027 < 0.05.

Overall, it can be concluded that government policy has a significant effect on internal factors, but internal factors do not have a significant effect on performance. Meanwhile, external factors have a significant effect on the performance of SMEs.

3.4 Simultaneous hypothesis
The simultaneous test criteria is if $F_{\text{count}} < F_{\text{table}}$ then Ho is rejected and if $F_{\text{count}} < F_{\text{table}}$ then Ho is accepted. To determine the effect of independent variables simultaneously on the dependent variable, calculations are performed using the following formula:

$$F_{\text{count}} = \frac{(n-k-1)R^2}{k(1-R^2)}$$

where $n$ = number of samples, $k$ = number of independent variables, $R^2$ = $r$ square. Result obtained $F_{\text{count}} = 16.677$

Since the calculated $F$ value (16.677) is greater than the $F$ table (2.389), it is concluded that the variables of Finance, Marketing, Human Resources, Production Technology, the Role of Related Institutions and Socio-culture, simultaneously have a significant influence on performance. This implies that policy makers in Indonesia must ensure that there are efforts to optimize facilitation activities. Support and government policies can help SMEs to be better, through facilitation activities, support and related policies that can increase their role with the development of the creative economy. Especially in facilitating marketing activities and providing both infrastructure and technology in order to increase competitive advantage. At the same time encourages the implementation of an alliance strategy with the government built by SMEs so as to provide many benefits, especially in improving performance to achieve competitive advantage for SMEs. As well as [3] that study examined factors affecting small and medium enterprises in Pakistan that includes marketing, technology, finance, managerial skills, government support and education. The results have supported that all the factors play significant role in development of SMEs except technology.

4. Conclusions
The findings of this study are that government policies have a direct influence on the internal factors of SMEs, but do not have a direct effect on SMEs’ performance. More intensive and more focused policies are still needed to improve the performance of SMEs. Meanwhile, external factors have a significant direct effect. This reflects a conducive environmental condition for the existence of SMEs in West Sumatra which encourages improvement in the performance of SMEs. The government must focus more on optimizing assistance such as facilitating training for both human resources and market expansion, so that these two internal factors can further improve the performance of SMEs. It is recommended that SMEs should be more creative and take advantage of government facilities so that their business performance becomes better.

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