The Influence of Social and Economic Factors of Entrepreneurs on SMEs in West Java

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Abstract

The population of entrepreneurs in Indonesia has increased from 1.6% to 3.47%. The number of women who work in the field of entrepreneurship is now 2.4 times more than men although the businesses for women tend to be smaller and grow more slowly than those for men. There are some constraints causing women to be reluctant to practice entrepreneurship, such as limited information, lack of profiles to imitate, limited access to business finance, lack of experience in doing business, and a low level of confidence to start and develop a business. Low level of education and ideological barriers of women related to the household, known as the "triple burden of women", are also among the constraints. The independent variables of this research were social condition variables (X_1) and economic conditions (X_2) while the dependent one was the number of Small and Medium Entrepreneurs (SMEs) (Y). The research population was the social and economic conditions and the number of SMEs from 27 districts of West Java. The samples were limited to only the data from 2016 – 2020 (5 years). The data analysis technique used for this research was panel data regression analysis. The results show that social and economic conditions have a positive and significant impact on the number of SMEs in 27 districts in West Java with an \mathbb{R}^2 score of 99%.

Keywords: SMEs, Social Factor, Economic, Panel Data, West Java

1. Introduction

Entrepreneurship plays a vital role in boosting the economic growth of a country and create an entrepreneurial ecosystem. An entrepreneurial ecosystem is a set of related elements of entrepreneurship support, including capital, market, leadership, human skills, culture, and government support (Isenberg, 2010). All elements in the ecosystem work together to create smooth entrepreneurial development that will contribute to the economic growth and social welfare (Acs et al., 2018).

The number of entrepreneurs in Indonesia has increased from 1.6% to 3.47% recently. Both men and women are involved in entrepreneurship. Women entrepreneurs, in specific, is currently 2.4 times more than men although the businesses they do tend to be smaller and grow more slowly than the businesses owned by men. They face some obstacles when they want to start a business, including limited information, lack of exemplary profiles, limited access to business finance, lack of experience in business, and lack of self-confidence in starting a business. Low level of education and ideological barriers of women related to the household, known as the "triple burden of women", are also among the constraints.

Entrepreneurship also exists in West Java, a province of Indonesia with an area of 35,377.76 KM2, 18 districts and 9 cities. West Java has a large population, which encourages the local government to build and develop the entrepreneurial potential of the locals through the West Java New Entrepreneurial Program as stipulated in the West Java Governor Regulation Number 79 of 2015 concerning the Production of One Hundred Thousand New Entrepreneurs in the West Java Province, the provincial government through 13 Device Organizations Regions, UPTD Cooperatives, and Entrepreneurship Education and Training Center. Academicians, practitioners from the business community, business consultants and

business actors are committed to building an entrepreneurial ecosystem in West Java province



Figure 1. District and Cities in West Java Province

An entrepreneurial ecosystem as a dynamic place creates a cumulative growth of new businesses. It focuses on the culture, local institutions, and networks that can develop in a certain area over time; however, local institutions tend to make a number of institutional changes and ignore the importance of institutions for the ecosystem evolution (Stam & Spigel. 2017; Lowe & Feldman, 2017).

This research thus aimed to investigate the influence of the West Java's social and economic conditions on the number of entrepreneurs. This study specifically looked at how the education index and income index achieved over the last 5 years (2016-2020) would affect the number of entrepreneurs in the SMEs category in each district and city of West Java. This study also compared the number of entrepreneurs before and during the pandemic.

2. Method

This research used panel data regression analysis. The research variables consisted of social condition variables (X_1) and economic conditions (X_2) as the independent variables, and the Number of Small and Medium Entrepreneurs (SMEs) (Y) as the dependent variable. The research population were all the data on the social and economic conditions of each district/city in West Java as well as the number of SMEs in these districts. The samples were limited to only the 2016 – 2020 data (5 years). The data were taken from the Statistics of Indonesia, Statistics of Jawa Barat, and Open Data Jabar.

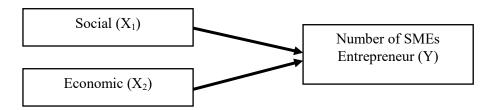


Figure 2. Design research

The operational definitions in this research were as follows:

 X_1 : It represents the social condition variable using data on the education level index in each district and city in West Java Province during the 2016 - 2020 period.

- X_2 : It symbolizes the economic condition variable using data on the expenditure level index in each district and city in West Java Province during the 2016 2020 period.
- Y: It represents the number of small and medium entrepreneurs in every city and district of West Java Province during the 2016 2020 period.

3. Results and Discussion

From 2016 to 2020, the number of small and medium entrepreneurs has grown. The pandemic that began in 2020 did not reduce the number of small and medium enterprises in West Java, which shows that they are able to survive in crisis. There are many contributing factors to this resilience, such as the ability of small and medium enterprises to adapt to situational changes, serve the community with good products and services at an affordable cost, and make use of local resources (human resources, capital, raw materials, and equipment) without having to depend on the imported supplies. Limited mobility during the social restrictions (PPKM) thus did not affect them.

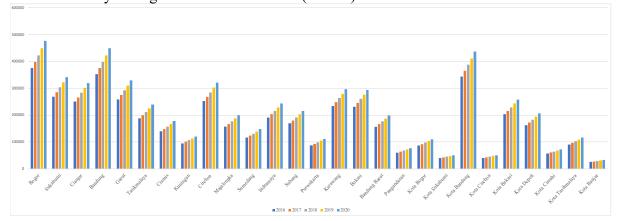


Figure 3. Number of small and medium entrepreneurs in every city and district throughout the province of West Java during the 2016 – 2020 period

Figure 3 shows the yearly increase in the number of entrepreneurs in each district and city of West Java. This indicates the success of the local government's program, namely the Production of One Hundred Thousand New Entrepreneurs. This program aimed to explore the entrepreneurial potential of human resources in West Java and to produce new entrepreneurs who are innovative, creative, independent and competitive.

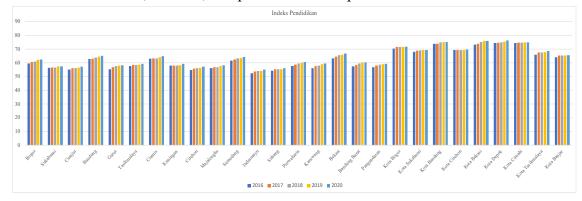


Figure 4. The education index in each district and city in West Java province during the 2016-2020 period

Figure 4 shows the education index in each district and city of West Java Province that continues to grow from year to year. Education equips human resources with various

competences, such communication competence and survival strategies. These competences determine the quality of human resources and their resilience during a crisis or sharp competition.

The West Java New Entrepreneurial Program initiated by the West Java's local government began with an entrepreneurship training that provides participants with basic entrepreneurial knowledge, including KSA (Knowledge, Skill, and Attitude). Then, it attempted to build an awareness and soft kills of the participants, so that there would be changing attitudes towards entrepreneurship and behaviors built, such as innovative, creative, independent and competitive. Increasing the education index should be the initial step of the local government before running an entrepreneurship training. The education index evenly distributed in almost all districts and cities of West Java can support the entrepreneurial ecosystem and facilitate the government to carry out more trainings in the future.

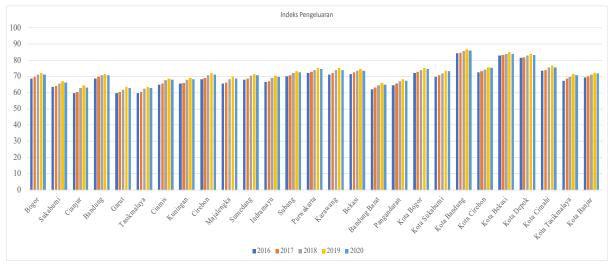


Figure 5. The expenditure index in each district and city of West Java Province during the 2016 – 2020 period

Table 1. Test Results from the Chow Test and Hausman Test

Model Test	Probability	Conclusion	
Chow Test	0.0000	Use FEM most appropriate than PLS	
Hausman Test	0.0000	Use FEM most appropriate than REM	

Table 1 shows that the use of the Fixed Effect Model (FEM) is the most appropriate model to be used in this study, based on the Chow Test and Hausman test. The results of the Prob (F-statistic) is 0.00000 < 0.05, indicating that the variables X_1 (Education Index) and X_2 (Expenditure Index) significantly affect the Y variable (Number of SMEs). The Prob value (t-statistics) of the X_1 variable of 0.0000 and X_2 of 0.0000 which is smaller than the significant level of 0.05 proves that the Education Index and Expenditure Index partially have a significant effect on the number of SMEs in West Java.

It was found that the number of entrepreneurs = -4.88 + 3.41 education index + 2.13 expenditure index. Based on the results of the regression analysis, the coefficient value of the education index variable is 3.41, which indicates that changes in the education index have a positive effect on the number of SMEs in West Java province. An increase of one-unit change in the education index will increase the number of SMEs by 3.41 units, assuming cateris paribus.

The expenditure index variable has a coefficient value of 2.13, which suggests that a

change in the expenditure index has a positive effect on the number of SMEs in West Java province. An increase of one-unit change in the expenditure index will result in an increase in the number of SMEs by 2.13 units, assuming cateris paribus.

Table 2. Results of the Fixed-Effect Model

Dependent Variable: LOG_Y1 Method: Panel Least Squares

Samples: 2016-2020 Periods included: 5 Cross-sections included: 27

Total panel (balanced) observations: 135

Variable	Coefficient	Std. Error	t-Statistic	Prob.			
LOG X1	3.412057	0.366181	9.317958	0.0000			
LOG X2	2.136987	0.251432	8.499267	0.0000			
$\bar{\mathrm{C}}$	-4.886262	0.427891	-11.41942	0.0000			
Effects Specification							
Cross-section fixed (dummy variables)							
R-squared	0.998032	Mean dependent var		5.196900			
Adjusted R-squared	0.997512	S.D. dependent var		0.308967			
S.E. of regression	0.015412	Akaike info criterion		-5.319520			
Sum squared resid	0.025179	Schwarz criterion		-4.695424			
Log likelihood	388.0676	Hannan-Quinn criter.		-5.065905			
F-statistic	1919.493	Durbin-Watson stat		1.437200			
Prob(F-statistic)	0.000000						

The results of this study are different from those of the previous studies. In this study, a constant number indicates a negative result, suggesting that the number of SMEs will remain the same or even decline in the last 5 years without the education index and expenditure index. This should be taken into account by the policymakers, so that the number of SMEs will increase in the future.

4. Conclusions

Government plays an important part in developing entrepreneurship in the country. This can be done through special regulations, entrepreneurial programs, a supportive ecosystem, and capacity building. In West Java, the local government can create policies aiming to increase the education index and the expenditure index of the community because these will have a positive impact on the number of SMEs in each district/city of this province. Some of the existing policies have already increased the number of SMEs in West Java Province from 2016 to 2020. However, the statistical results were found to be negative constant numbers, which should be the concern of the district, city, and provincial government.

Further researchers are highly recommended to include a more comprehensive and upto-date method as well as more data regarding the number of SMEs in each district/city of West Java. A study with a monthly data span and other variables that affect the number of SMEs will also be useful to describe the trend in the number of SMEs in West Java province comprehensively.

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