

The Impact of Changes in Village Progress on the Income of Village-Owned Enterprises



Isep Amas Priatna¹, Dedi Budiman Hakim², Yusman Syaukat³, Jaenal Effendi⁴

^{1,2,3,4} IPB University, Indonesia

ABSTRACT: The purpose of this study was to analyze the effect of changes in village progress on the operating revenues of village-owned enterprises (BUMDesa). The data is sourced from the Developing Village Index (IDM), profit and loss statements, and balance sheets for 2019-2020 from 30 BUMDesa units located in Bogor Regency, West Java Province, Indonesia. The method used is a panel data regression analysis approach. The results showed that the model chosen in describing the effect of changes in village progress on the income of Village Owned Enterprises was the Random Effects (REM) Model with an F value of 0.000316 less than a significant level of 5% indicating that the level of development of village progress had a positive effect on operating revenues village-owned enterprises. The results of this study at least provide confirmation to the Government to encourage village progress so that it has an impact on the progress of business institutions in the village.

KEYWORDS: Village Progress, Village-Owned Enterprises, Operating Revenues

I. INTRODUCTION

Village development is connoting the development of the whole rural area with the aim of improving the quality of life of rural communities. For this reason, village development has a comprehensive and multidimensional concept, and includes the development of agriculture and related activities; Village industry and craft centers, socioeconomic infrastructure, community services and facilities, especially, human resources in rural areas (Singh, 2009). Village development is still relevant to be discussed and finds alternative solutions according to Usman (2006) this is because first, although, in the last two decades, the development of the city developed very rapidly, in general, the territory of the country was still dominated by rural areas. Second, although many rural development policies and programs are carried out marked by modern technology innovation, in general, the socio-economic conditions of the village are still alarming. The issue of poverty and inequality is still a trigger for various political conflicts or prolonged political movements.

In order to improve the welfare of rural communities in Indonesia, more than ten years ago, the government and development partners have massively pushed for various development and community empowerment programs carried out at the village level. The program seeks to increase the development of the rural economic base, but these efforts have not yielded the desired results. In 2004, Law Number 32 of 2004 concerning Regional Government and Government Regulation No. 72 of 2005 concerning villages was born and what is interesting in this law is that villages can establish Village Owned Enterprises (BUMDesa) according to the needs and potential of the village. In 2014 Law No. 6 of 2014 concerning villages was born and this is at the same time a milestone in changing the paradigm of village management. Villages are no longer considered objects of development but instead are placed as subjects and spearheads of development and improvement of people's welfare. In order to strengthen the role of BUMDesa for the economy of rural communities, in 2021 the Government of Indonesia issued Government Regulation Number 11 concerning BUMDesa. In this Government Regulation, there are changes as well as strengthening BUMDesa including institutions, strengthening organizations to strengthening coaching/development, and strengthening BUMDesa capital and assets through village and community capital participation and direct assistance to become BUMDesa capital/assets.

Data from the Ministry of Villages, Development of Disadvantaged Regions and Transmigration in 2019 shows that the development of the number of BUMDesa has increased from year to year, at the beginning of its establishment in 2014 the number was only 1,022 units, so in October 2019, the number had reached 47,717 units or around 64% of the villages already had work unit with a workforce absorbed around 1 million workers. However, the large number of BUMDesa, whose business development status is dominated by the basic status of 29,286 units, followed by developing status of 5,491, and finally

The Impact of Changes in Village Progress on the Income of Village-Owned Enterprises

advanced status of 1,830 units. The above conditions will be very far from the ideals of establishing BUMDesa, it is hoped that villages will be able to manage their resources independently and autonomously so that they can improve the quality of life and welfare of rural communities through increasing the village economy, creating employment opportunities, increasing community welfare through improving public services, growth and equal distribution of the village economy and increasing village community income and village original income. Which in the end is expected to reduce the gap in national development.

In view of the theory of territorial capital states that each region has a certain territorial capital that is different from other regions and generates higher returns for certain types of investment than others because it is more appropriate to the area and uses its assets and potential more effectively. (OECD, 2001). This condition will affect the development of existing institutions in the area. An empirical study shows that there is a role for internal and external resources in the development of BUMDes (Zuhdiyaty et al, 2019). The same was conveyed by Harisandi and Anshory (2017) that village natural resource capital and social capital greatly influence the development of BUMDes. BUMDes will be able to develop well if the condition of natural resources and the village community is very supportive of BUMDesa business development.

On the other hand, underdeveloped villages still dominate the face of village development in Indonesia. The development of village status in 2018 issued by the Ministry of Villages, Development of Disadvantaged Regions and Transmigration shows that out of a total of 69,460 villages, 313 villages have the status of independent villages, 4,784 developed villages, 30,345 developing villages, 27,163 underdeveloped villages, and 6,855 very underdeveloped villages. On the basis of the problems above, researchers are very interested in digging deeper into the influence of village development on BUMDesa business development. The research approach taken will certainly be very different from previous researchers, namely using a panel data econometric approach.

II. LITERATUR REVIEW

Village Owned Enterprises

Village-Owned Enterprises (BUMDesa) according to Law Number 6 of 2014 are business entities whose capital is wholly or mostly owned by the Village through direct participation originating from Village assets which are separated to manage assets, services, and other businesses to the fullest extent possible the welfare of the village community. BUMDesa in its activities is not only oriented towards financial gain but also oriented towards supporting the improvement of the welfare of the village community. BUMDesa is expected to be able to develop business units utilizing economic potential.

From a philosophical point of view, BUMDesa is a business entity, not solely for profit, but also has a service content for the community and carries out efforts to empower the community and drive the village economy. Therefore, BUMDesa should not take over economic activities that are already carried out by residents but create new ones, provide added value or synergize existing economic activities. BUMDesa is a form of Social Enterprise, which is a business institution established to solve social problems, by creating added value (Creating Value), managing potential and assets (Managing Value), and providing maximum benefit to citizens (Distributing Value).

In 2021 the Government issued Government Regulation Number 11 concerning BUMDesa. BUMDesa is a legal entity established by the village and/or with the villages to manage a business, utilize assets, develop investment and productivity, provide services, and/or provide other types of businesses for the greatest welfare of the village community. This Government Regulation changes and strengthens BUMDesa, including from an institutional perspective BUMDesa is BUMDesa as a Legal Entity that can directly run its business (Operating Company) or become the parent company for a business unit (Investment Company) which is a legal entity and BUMDesa cannot be dissolved.

Territorial Capital

The Territorial capital was first mentioned in the context of a regional policy, proposed by the Organization for Economic Co-operation and Development (OECD); then his expression is repeated by the Regional Directorate General of the European Union Commission (EU) which says that each region has a certain territorial capital that is different from other regions and generates higher returns for certain types of investments than others because it is more in accordance with the area and uses assets and their potential more effectively. (OECD, 2001)

According to Camagni (2009), territorial capital is a set of local assets - natural, artificial, human, organizational, relational, and cognitive - that consist of the potential of a particular area. Ploeg and Marsden (2008) define territorial capital as the amount and relatedness of different forms of capital (or different resources) that are required, mobilized, and actively used in (and reproduced by) the regional economy and society. According to Ventura et. al (2008) territorial capital is a supply of resources specific to a place and available to those who live and work in the region. These resources (material and non-material) are common goods for local communities.

The Impact of Changes in Village Progress on the Income of Village-Owned Enterprises

From the description above, the researcher proposed a hypothesis for this research, namely that changes in village progress affect the income level of BUMDesa.

III. METHODOLOGY

Research Design

The research method was carried out using a quantitative approach with data sources derived from the selected BUMDesa balance sheet and profit loss data, while village progress data was based on Village Development Index (IDM) data in 2019-2020. Because this research involves time series and cross-sectional data. The nature of the time series can be seen from taking a period of 2 years, while the cross-section can be seen from the sample of 30 BUMDesa. Considering this, the data analysis used in this study is the panel data regression method. Panel data is a combination of time series data and cross-section data. In accordance with the research objectives, of this study the regression equation model used is as follows:

$$\ln Y_{it} = \beta_0 + \beta_1 \ln X_{it} + \varepsilon_{it} \dots \dots \dots (1)$$

Where : Ln = Natural Logarithm, Y = Developing Village Index Value, X = BUMDes Revenue, β_0 = Constant, β_1 = Regression Coefficient, ε_{it} = Error, i = unit cross section (BUMDesa), t = year studied

Stages of Analysis with Panel Data Regression

As with the analysis using simple regression, to perform panel data regression analysis, certain steps must also be followed. Broadly speaking, the stages in panel data regression analysis begin with estimating the regression equation models. After that, it continued by conducting a model suitability test to determine which regression equation model is the most appropriate to use in this study. Furthermore, from the most suitable equation model, the classical assumption test is carried out. If the classical assumption test has been carried out, only then can the model equation be interpreted.

IV. RESEARCH RESULTS AND DISCUSSION

Research Results

Model Selection

The results of data processing using the panel data regression approach produce three models with regression equations, namely the Common Effect Model (CEM), The Fixed Effect Model (FEM), and The Random Effect Model (REM).

Table 1. Common Effect Model (CEM) Output Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	19.93481	0.596146	33.43948	0.0000
X1	5.892058	1.603549	3.674385	0.0005
R-squared	0.188824	Prob(F-statistic)		0.000522
Adjusted R-squared	0.174838			

Source : Eviews (processed)

Table 2. The Fixed Effect Model (FEM) Output Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	21.26555	1.110704	19.14600	0.0000
X1	9.626260	3.102622	3.102621	0.0042
R-squared	0.842781	Prob(F-statistic)		0.000014
Adjusted R-squared	0.680141			

Source : Eviews (processed)

Table 3. Results of the Random Effect Model (REM) Output

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	20.26990	0.670862	30.21471	0.0000
X1	6.832366	1.780377	3.837596	0.0003
R-squared	0.201918	Prob(F-statistic)		0.000316
Adjusted R-squared	0.188158			

Source : Eviews (processed)

To determine the best model, the 3 regression equation models were tested. The first test performed was the chow test to choose between the common effect model (CEM) and the fixed effect model (FEM). Chow test results are shown in the following table:

The Impact of Changes in Village Progress on the Income of Village-Owned Enterprises

Table 4. Chow Test Output

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.159532	(29,29)	0.0001
Cross-section Chi-square	98.450753	29	0.0000

The results of the likelihood ratio/chow test for this model have a probability value of F that is smaller than Alpha (0.05), namely the probability value of F is $0.0001 < 0.05$ so the appropriate model from these results is the fixed effects model. After that, the Hausman test was carried out to find a better model by comparing The Fixed Effect Model (FEM) with the Random Effect Model (REM). Hausman test results are shown in the table below:

Table 5. Hausman Test Output

Test Summary	Chi-Sq.		
	Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	1.208986	1	0.2715

Based on the results of the Hausman test, it shows a significance value of $0.2715 > 0.05$, so the random effects model is better than the fixed effects model. Because the results have not found the same model from each test, then it is continued with the determinant method, namely the Lagrange Multiplier test to determine whether to choose the Random Effects Model or the Common Effects Model.

Table 6. Lagrange Multiplier Test Output

	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	10.54967 (0.0012)	0.998863 (0.3176)	11.54853 (0.0007)

The output results above show the probability value of Breush-Pagan (BP) in the sub-cross section of 0.0012. The hypothesis is that if the Breush-Pagan (BP) probability is greater than Alpha ($0.0012 < 0.05$) so the appropriate method for the above results is the Random Effects Model (CEM). So the conclusion from this data is that the best method for conducting research is the Random Effects Model (CEM).

To ensure that the research results are valid with the data used theoretically unbiased, consistent, and efficient estimation of the regression coefficient, a classical assumption test is performed. In this study, there is a classic assumption test that is used, namely the normality test and the heteroscedasticity test. The results of the normality test show that the probability value of jarque fall is 0.367477 which is greater than the alpha level of 0.05 so the data is normally distributed.

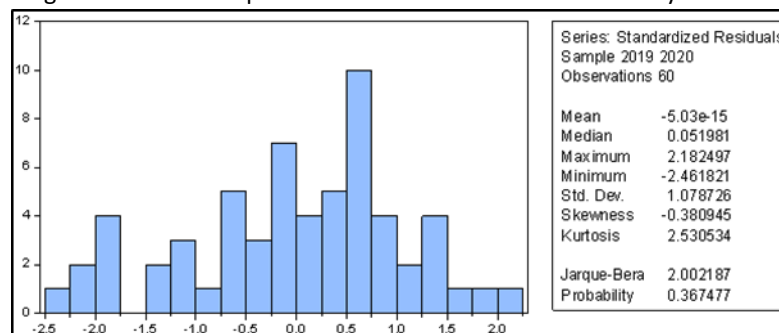


Figure 1. Normality Test Output

While the results of the Heteroscedasticity test with the Glejser approach yielded a p-value of variable X showing a value greater than the alpha level of 0.05, it can be concluded that this data is free from heteroscedasticity problems.

Table 7. Heteroscedasticity Test Output

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.409747	0.362331	1.130865	0.2628
X1	-1.701200	0.974619	-1.745504	0.0862

The Impact of Changes in Village Progress on the Income of Village-Owned Enterprises

DISCUSSION

Based on the estimation results in table 3, the R-Square (R^2) value is 0.201918. The R-Square value (R^2) explains that the variation in the value of the Y variable can be explained by the model at 20.19 percent. This means that the BUMDesa income variable can be explained by the change in the village progress variable, the remaining 79.81 percent is explained by other factors that are not included in the research model. The table also shows the F test value of 0.000316 (<0.05), which means that simultaneously the independent variables have a significant effect on the dependent variable BUMDes income in 2019-2020.

These results indicate that village development will positively influence BUMDesa's business development. Villages that are in the advanced or independent category will have a better influence on BUMDesa's business growth compared to villages that are in the backward category. According to the Regulation of the Ministry of Villages and PDTTrans Number 2 of 2016 it is explained that an Independent Village, or can be referred to as a Sembada Village, is an Advanced Village that can carry out Village development to improve the quality of life and life as much as possible for the welfare of the Village community with social resilience, economic resilience, and sustainable ecological resilience. For this reason, for independent villages, the conditions for the quality of social and economic life of the community are much better, thus encouraging village communities to be able to utilize village-owned enterprises to become village business institutions as a place for transactions and fulfill their daily needs.

This is in stark contrast to underdeveloped villages, namely villages that have potential social, economic, and ecological resources but have not, or have not managed them enough to improve the welfare of the village community, and the quality of human life, and experience poverty in its various forms. So this condition affects the quality of social and economic life of the community which is not good so the impact on village-owned enterprises is not used as an institution to meet community needs. This finding is in accordance with the theory of territorial capital, which explains that each region has a different rate of return than other regions depending on the condition of the resources owned by the region. As stated by Camagni (2009) that territorial capital is a set of local assets (natural, artificial, human, organizational, relational, and cognitive) which consist of the potential of a particular area. Meanwhile, Ploeg and Marsden (2008) define territorial capital as the amount and relationship of different forms of capital (or different resources) that are required, mobilized, and used actively in (and reproduced by) the regional economy and society. According to Ventura et. al (2008) territorial capital is a supply of resources specific to a place and available to those who live and work in the region. These resources (material and non-material) are common goods for local communities.

V. CONCLUSION

Based on the results of the research and discussion, shows that answering the results of the hypothesis that changes in village development have a very positive and significant effect on changes in the business income of village-owned enterprises. For this reason, the village government must be able to improve the development of its village in various fields with the aim of improving the socio-economic quality of the village community. Increasing the quality of life of the village community will encourage changes in the consumption pattern of the village community so that it indirectly increases the business income of village-owned enterprises.

VI. SUGGESTION

Suggestions from the results of this study include:

1. The village government must be able to improve the development of its village in various fields to improve the socio-economic quality of the village community. Increasing the quality of life of the village community will encourage changes in the consumption pattern of the village community so that it indirectly increases the business income of village-owned enterprises.
2. For future researchers to study more deeply other factors that influence the increase in income of village-owned enterprises so that their founding goals can be achieved.

REFERENCES

- 1) Singh. 2009. Rural Development : Principles, Policies and Management. Third Edition. India : SAGE Publications
- 2) Usman, S. 2006. Community Development and Empowerment. Yogyakarta: Student Libraries.
- 3) Sannella, M. J. 1994 Constraint Satisfaction and Debugging for Interactive User Interfaces. Doctoral Thesis. UMI Order Number: UMI Order No. GAX95-09398., University of Washington.
- 4) OECD. 2001. Territorial Outlook. Paris: OECD

The Impact of Changes in Village Progress on the Income of Village-Owned Enterprises

- 5) Zuhdiyaty, N., Maryunani, Syafitri, S. 2019. "Analysis Of BUMDes Strengthening For Community Welfare With The SLA Approach (Case Study Of Kalipucang Village, Tukur, Pasuruan)". IJSTR : INTERNATIONAL JOURNAL OF SCIENTIFIC & TECHNOLOGY RESEARCH, 8(2), 40-43.
- 6) Harisandi, Y., & Anshory, M. I. 2017. ANALYSIS OF THE EFFECT OF BUMDES IN IMPROVING RURAL ECONOMY IN SITUBONDO DISTRICT. GROWTH, 15(2), 47-61.
- 7) Camagni, R. 2009. Territorial capital and regional development. In R. C. Nijkamp, Handbook of Regional Growth and Development Theories (pp. 118–132). Cheltenham: Edward Elgar.
- 8) Ploeg, J. D. V. D., & Marsden, T. 2008. Unfolding webs: the dynamics of regional rural development. Assen, the Netherlands: Van Gorcum, 262.
- 9) Ventura, F et al. 2008. The rural web: A synthesis. In J. & Van der Ploeg, Unfolding Webs: The Dynamics of Regional Rural Development (pp. 149–174). Assen: Van Gorcum.



There is an Open Access article, distributed under the term of the Creative Commons Attribution – Non Commercial 4.0 International (CC BY-NC 4.0) (<https://creativecommons.org/licenses/by-nc/4.0/>), which permits remixing, adapting and building upon the work for non-commercial use, provided the original work is properly cited.