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Article

The Role of Village-Owned Enterprises (BUMDes) in Village Development: Empirical Evidence from Villages in Indonesia

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Abstract

This study aims to find empirical evidence of the role of Village Owned Enterprises (BUMDes) in village development, calculated through the Village Development Index (IDM) value. The econometric analysis uses panel data regression at the level of all villages in Indonesia from 2018 to 2020. The results showed that BUMDes has a positive and significant relationship to the level of village development, with the average IDM value of villages with BUMDes being higher than villages without BUMDes. BUMDes, which has an economic business and an environmental sector, contributes significantly to the increase in IDM value.

Keywords: village law; village fund; BUMDes; Development Village Index (IDM).

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I. Introduction

The goal of national development is the achievement of justice, prosperity, and well-being for the entire community. The National Medium-Term Plan (RPJMN) 2020–2024 highlights rural and urban development as two of the government's top priorities (Regulation of the President RI No.18, 2020). Furthermore, regional inequality between rural and urban areas in Indonesia remains a significant issue (Puri & Khoirunurrofik, 2021) According to 2022 data from Statistics Indonesia, more people in rural areas live in poverty than in urban areas. As of March 2022, the rural population living in poverty was 14.34 million, compared to 11.82 million in urban areas (Statistics Indonesia, 2022). Given these conditions, village development remains the government's priority policy following the 2020–2024 RPJMN to alleviate 10,000 underdeveloped villages while encouraging 5,000 independent villages in Indonesia. The enactment of Village Law No. 6/2014 paved the way for villages, as the lowest administrative unit of government actively as subjects in village development.

Rural development remains a key agenda for many countries in the world. Some village development policies that have been implemented in other countries, including India with the Model Village program that aims to encourage villages in India, have succeeded in encouraging villages in India to reach advanced categories in agriculture, public services, education, health, banking facilities, waste management, and greening efforts (Bhattacharyya *et al.*, 2018). Social Enterprise (SE) has been able to mobilize ideas and resources to increase cooperation with outside parties and become a source of strength to encourage the development and welfare of rural communities in case studies in rural Austria and Poland (Richter, 2019). In South Korea, there is a Saemaul Undong policy, which means the New Village Movement, which emphasizes the role of local leaders as key actors in the village to mobilize village communities to participate and contribute to village development programs (Yang, 2018).

In contrast to the Saemaul Undong movement, which relies on community participation and local values, Japan has successfully implemented a village development program with the concept of One Village, One Product (OVOP), which means one village, one product. The OVOP concept emphasizes increasing the competitiveness of local superior products to increase the income of villagers and the local economy. The OVOP program has been widely applied in several Asian and developing countries, including Africa and Latin America, as an alternative path to economic development (Thanh *et al.*, 2018). The Thai government has also adopted the concept through OTOP (One Tambon, One Product), which means one sub-district, one product, with a focus on exploring the potential and promotion of regionally superior commodities and services (Bureekhampun & Maneepun, 2021).

Unlike OVOP, which is based on regions and products, China's village development program is based on rural industrialization run by township and village enterprises (TVEs). This rural development program through TVEs is a form of delegation of authority from the central government to local governments, with the aim that local governments can develop rural industries in China. The establishment of TVEs aims to enable local governments to implement economic policies following the characteristics of their region. TVEs has become one of the primary sources of income for rural communities in China after the fiscal reform in 1980, considering that TVEs are one of the most dynamic sectors in the

Chinese economy due to their rapid growth and the need for regional economic independence after fiscal decentralization (Oi, 1999). TVEs have played a key role in China's rural-based industrialization through the absorption of rural labor, which in turn increases rural income (Wang, 2005).

In order to support the village development process and strengthen village development quality, the Government of Indonesia allocated the Village Fund directly sourced from the national budget as mandated by Village Law No. 6/2014. Village Law No. 6/2014 explicitly stated that the village fund program's goals are to reduce poverty and inequality, promote rural infrastructure development, and raise local and village community revenue by developing local economic institutions. The government has carried out various programs for village development since the rollout of village funds. However, there are still several challenges in their implementation, including the need for more human resources, low participation of the community, and compliance with laws and policies (Masbiran *et al.*, 2021). The mapping and tagging analysis of village fund spending shows that the share of economic spending in eastern Indonesia is lower than in other regions. In contrast, the share of economic spending in Java and Bali shows a higher figure (Yusuf & Khoirunurrofik, 2022). Furthermore, economic mechanisms and institutions in the village have yet to function effectively, resulting in dependence on grants and assistance from the government, thus undermining the spirit of village independence (Zulkarnaen, 2016; Srirejeki, 2018).

Rural business institutions are essential in economic development and contribute to national prosperity and welfare. On the other hand, rural institutions are still a weak point in rural development (Phillipson *et al.*, 2019). However, globally, the OECD (2020) states that rural economies continue to contribute significantly to employment and national prosperity. Increasing the capacity of village institutions is essential to achieving economic progress in a rural village. It will enable the village to manage its resources effectively and create local community networks that will enable it to become resilient regarding social, economic, and environmental aspects (Saefulrahman, 2015).

In Indonesia, one of the central government's efforts for village development is establishing local economic institutions called Village-Owned Enterprises (BUMDes). BUMDes, as a multifunctional institution, can play a role in the economic sector, which is realized by meeting the villagers' needs and providing social services to the community (Khoirunurrofik, 2020). Ultimately, the existence of BUMDes is expected to encourage programs to improve village superior products, drive local economic growth, and improve the welfare of rural communities through the active role of village community participation through the intervention of the Central Government and Local Government. Rural entrepreneurship has become one of the leading forces driving GRDP, especially in developing countries (Arifin *et al.*, 2020). Entrepreneurial strategy is crucial in improving regional economic development. (Rokhim *et al.*, 2017). BUMDes is a form of village entrepreneurship expected to encourage village empowerment and independence (Kania *et al.*, 2021).

BUMDes can be developed through a neo-endogenous village development approach, combining bottom-up and top-down development (Gkartzios & Lowe, 2019). The government and community can develop BUMDes as a forum for implementing village entrepreneurship, which will ultimately improve the village's economic level and be the source of economic strength for the local community.

BUMDes seeks economic benefits and provides social and non-economic benefits for village development. The economic benefits are increasing village revenue, employment, and economic activity in rural areas. The social and non-economic benefits are that BUMDes can strengthen the sense of togetherness among villagers, strengthen the sense of cooperation, foster community pride in the village, become a forum for community in the village, and encourage the growth of initiatives and cohesion of village communities to build villages independently (Larasdiputra *et al.*, 2019).

There has been a substantial growth in the quantity of BUMDes (Village-Owned Enterprises) across Indonesia. In Indonesia, the number of BUMDes (Village-Owned Enterprises) experienced a significant rise from 14,463 units in 2015 to 63,067 units in 2020. The rise in the number of BUMDes corresponds to an increase in the allocation of village funding directed toward each village. The transfer of village funds in 2015 totaled IDR 20.76 trillion, and afterward, there was a nearly threefold rise in 2020, reaching IDR 71.2 trillion (Ministry of Finance, 2022).

The growing number of BUMDes will enhance the Village's Original Income through the growth of local rural products and the establishment of local companies, hence promoting economic autonomy at the village level (Nugroho *et al.*, 2022). Several previous studies have shown that BUMDes in Indonesia has a positive effect on the village economy through the presence of micro and small industries, savings and loan cooperatives, and stalls for selling agricultural inputs and village original income, as well as empowering the village agricultural economy (Puri & Khoirunurrofik, 2021; Nugroho *et al.*, 2022). The majority of research that looks at the existence of BUMDes on village development through the IDM value is still primarily qualitative and limited to one particular area (Larasdiputra *et al.*, 2019; Dolfriandra Huruta *et al.*, 2020; Sudrajat, 2020).

The study of Iftitah & Wibowo (2022) shows that capital participation of BUMDes through village funds has a positive and significant effect on the value of the Village Development Index through the business of managing markets in the village, providing clean water, channelling credit, and providing distribution services in Gowa Regency. The existence of BUMDes has received much attention from the public agenda in Indonesia due to their ability to provide and encourage sustainable employment opportunities in rural areas, but based on previous research, the increasing number of BUMDes has not been able to provide employment opportunities for villagers (Feher, 2014; Arifin *et al.*, 2020).

Another study also shows that the development of BUMDes in Pejarakan village, Buleleng Bali, has been able to open new local jobs and business units and encourage the entrepreneurial spirit of the village community through savings and loan businesses, rental of agricultural equipment (Larasdiputra *et al.*, 2019). The success and progress of BUMDes are also reflected through the Village Development Index (IDM), which indicates the progress of village development. From 2018 to 2020, the three villages had the status of Advanced Villages with details of the IDM value for Panggungharjo Village as 0.8640, Ponggok Village as 0.7121, and Pejarakan Village as 0.7337.

One of the indicators that indicates the level of village development is the value of the Village Development Index (IDM). IDM is a composite index formed from the Village Social Resilience Index (IKS), Economic Resilience Index (IKE) and Environmental Resilience Index (IKL), which is compiled to support the government's efforts to alleviate Disadvantaged Villages and increase the number of Independent Villages. One of the

indicators that plays a role in supporting IDM is Village-Owned Enterprises (BUMDes). BUMDes has a role in encouraging village economic resilience, which will support the increase in the value of IKE as a component of the IDM value. Ultimately, BUMDes can contribute to village development. Given that BUMDes has a multifunctional role, namely in the social, economic, and environmental aspects, which is in line with the objectives of IDM, which are also multidimensional (social, economic, and environmental), the existence of BUMDes is expected to contribute to driving the IDM value through the various businesses of BUMDes.

BUMDes is one of the pillars of economic activity that fulfills the needs of village communities for goods and services (Larasdiputra *et al.*, 2019; Kania *et al.*, 2021). Previous studies have shown a relationship between BUMDes and the Village Development Index. However, they are still limited to qualitative aspects and case studies in certain areas. The results of research conducted by Sudrajat (2020) show that BUMDes in Panggungharjo Village, Yogyakarta, provides benefits for community empowerment through increasing community economic businesses and community income through the "Kampoeng Mataraman" tourism village program, improving environmental quality through the Waste Management Business Group (KUPAS), developing local MSMEs, and building rental business units. Research conducted in Ponggok village in Central Java shows that BUMDes plays a role in creating new jobs in the village through various business units developed among tourism businesses, trading businesses, and savings and loan businesses (Huruta *et al.*, 2020).

The success of BUMDes as village entrepreneurship is highly dependent on the active role and involvement of the village government, so synergy and cooperation are needed by placing the village government on the supervisory board of BUMDes implementation (Amri, 2019). BUMDes can reflect the village community's economy based on the needs, desires, and potential of the village. The Ministry of Villages strives to establish new BUMDes as economic agents to sustain the village economy (Srirejeki, 2018). Therefore, the government can establish programs and activities to develop BUMDes performance, including by increasing the capacity of human resources in the village in order to manage and develop BUMDes performance (Kania *et al.*, 2021), increasing community participation in BUMDes utilization (Arifin *et al.*, 2020), harmonizing work programs between BUMDes managers and village officials (Firdaus, 2018), mapping BUMDes business units following village assets and village potential, improving financial reporting integrity (Raharjo *et al.*, 2022), and increasing BUMDes business diversification (Agunggunanto *et al.*, 2016).

Based on several previously described studies, most research focused on explorations of BUMDes on the outcome, such as Village Original Revenue (Puri & Khoirunurrofik, 2021), employment (Arifin *et al.*, 2020) or the relationship between BUMDes and village development through the IDM value, which is only limited to one region (Larasdiputra *et al.*, 2019; Huruta *et al.*, 2020; Sudrajat, 2020; Iftitah & Wibowo, 2022). This research seeks to fill the existing gaps through empirical analysis examining the relationship between the existence of BUMDes and the overall level of village development as measured by the Village Development Index (IDM) value. This research aims to analyze the association between the presence of BUMDes and the type of business field with the level of village development as measured by the Village Development Index (IDM) value. It is expected to contribute to providing empirical evidence of the role of BUMDes in the level of village development throughout Indonesia as measured by the IDM value in the 2018-2020 timeframe.

Furthermore, this research is expected to complement previous qualitative research and case studies. Furthermore, this research is expected to provide government input to formulate BUMDes development activity programs in Indonesia.

II. Literature Review

2.1. Village development

The approach model in rural development consists of exogenous, endogenous, and neo-endogenous approaches. In the exogenous approach, the primary power source for rural development comes from outside the village. According to Lowe *et al.* (1998), this exogenous model places the function of rural areas as food sources and primary sector production centers to support urban economic development so that the focus of rural development tends to be directed towards industrialization and agricultural specialization as well as the provision of labor and capital. In addition, in terms of policy-making, the exogenous model is top-down, so the Central Government has a decisive intervention in rural development. In contrast to the exogenous approach, in the endogenous model, the primary source of rural power is the local rural resources themselves, and the focus of rural development is on increasing local capacity, including skills, institutions, and infrastructure. Besides, the village area's function is to provide various economic services for village development. The endogenous approach is bottom-up through utilizing local resources to make the village development more participatory.

The combination of exogenous and endogenous models gave birth to the neo-endogenous approach, where village development is included in the relationship between external parties and local resources. The source of strength for village development in the neo-endogenous model is the interaction between rural and urban areas through inclusive, multiscale, and multisectoral governance arrangements (Gkartzios & Scott, 2014). Rural development through the neo-endogenous model is best achieved through a combination of local resources and local actions integrated within a broader network that offers an alternative to dualistic "top-down" or "bottom-up" perspectives so that it can ultimately benefit entrepreneurship and economic development in rural areas (Atterton, 2007; Bosworth *et al.*, 2016).

2.2. Social Enterprise and Village Entrepreneurship

Social Enterprise is a hybrid social and economic business model that catalyzes social change by creating new business fields or innovations in organizational management (Zahra *et al.*, 2009). Social entrepreneurship is related to sustainable development, where there are social, economic, and environmental goals in order to improve the overall welfare of society and ultimately create an independent and empowered society (Díaz-Foncea & Marcuello, 2012; Farmer *et al.*, 2016; Galindo-Martín *et al.*, 2020; Thelken & de Jong, 2020). Village entrepreneurship is one of the strategies to develop and grow welfare, ultimately improving the village economy (Ansari *et al.*, 2013). Village entrepreneurship can accelerate village growth and has the potential for job creation and women's empowerment in rural areas (Elkafrawi *et al.*, 2022).

III. Methods

3.1. Data and Identification

The data in this study includes data on all villages in Indonesia in the 2018-2020 period. This study uses balanced data (the number of village samples per year is the same) with 74,949 villages each period. The data sources are from the Ministry of Villages, Development of Disadvantaged Regions and Transmigration (Ministry of Village PDTT), Statistics Indonesia, Ministry of Finance, and Ministry of Home Affairs. This research uses a quantitative approach with an econometric approach. The quantitative approach to the method uses descriptive and inferential statistics. Descriptive statistics for each variable explain the characteristics of villages that have BUMDes and villages that do not have BUMDes. The merging of village codes from each data uses an ID in the form of a 10-digit village code. Overall, the authors managed to match data for 74,949 villages for all variables in 2018–2020.

3.2. Estimation Strategy

This research uses a quantitative approach with an econometric approach. The quantitative approach to the method uses descriptive and inferential statistics. Descriptive statistics for each variable explain the characteristics of villages that have BUMDes and villages that do not have BUMDes. The merging of village codes from each data uses an ID in the form of a 10-digit village code. Overall, the authors managed to match data for 74,949 villages for all variables in 2018–2020.

The dependent variable in this study is the value of the Village Development Index (IDM), which measures the development of village development levels. The Ministry of Villages PDTT published an IDM to determine the independence status of each village. This research uses the IDM value from 2018 to 2020 to see the role of BUMDes on village development. The IDM value is a composite of three resilience indices, namely the Social Resilience Index (IKS), the Economic Resilience Index (IKE), and the Ecological/Environmental Resilience Index (IKL).

The main independent variable for this study consists of the presence of BUMDes in each village. BUMDes can run several types of businesses in the social, economic, and environmental fields. Furthermore, this study also includes interaction variables between BUMDes and each type of business, consisting of social, economic, and environmental businesses. The interaction approach can empirically see and analyze whether the presence of BUMDes in IDM can be of higher value if combined with each type of business field. If the result of the interaction variable shows a positive number, the presence of BUMDes and its business fields will be more effective in increasing the value of IDM. The control variables used in this study are village funds, population, village head education, and social capital. Village funds are the largest source of village revenue for physical and non-physical village development. They are also the primary source of capital for establishing, growing, and developing BUMDes (Arifin *et al.*, 2020). The village head's role as a local leader is closely related to the success of village development. Villages managed by village heads with a higher educational background (at least upper secondary level) tend to have a more independent, developed, and advanced status than villages managed by village heads with a lower educational background (Nadia & Mahi, 2023). The population variable is also essential in community empowerment programs that act as human capital to develop local products and businesses and beneficiaries of village development activities (Nugroho *et al.*,

2022; Iftitah & Wibowo, 2022). Furthermore, the social capital variable is one of the pillars of neo-endogenous development that contributes to the development of rural industries, entrepreneurship, and the welfare of rural communities, which is a source of strength for sustainable rural development (Meador, 2019; Adit & Qibthiyyah, 2022).

This research uses panel data analysis to provide more efficient parameter estimation (Hsiao, 2007; Baltagi, 2005). Panel data (pooled data) contains sample data of individuals at a certain period. A balanced panel containing the number of observation periods is equal for each cross-section unit. Conversely, if the number of observation periods differs for each cross-section unit, it is called an unbalanced panel. In this study, the dataset used is a balanced panel.

This study uses fixed-effect panel data regression, considering that fixed effects can overcome the bias derived from time-invariant variables or factors that cannot be observed (unobserved heterogeneity) in the model. Fixed-effect models can also allow individual or time-specific effects to correlate with explanatory variables (Hsiao, 2007). This research model adds control variables, such as the village's demographic, economic, and social factors, that may affect the relationship between BUMDes and the Village Development Index. These control variables are to reduce the risk of endogeneity, which is when the independent variable is biased because of the influence of the dependent variable.

Referring to Nugroho *et al.* (2022) and Iftitah & Wibowo (2022), the empirical research model used is formulated as follows:

$$IDM_{it} = \beta_0 + \beta_1 DB_{it} + \beta_2 DB_{it} * SOS + \beta_3 DB_{it} * ECO_{it} + \beta_4 DB_{it} * LKG_{it} + \beta_5 X_{it} + \delta_i + \eta_t + \varepsilon_{it}$$

Where:

IDM_{it}	:	Indeks Desa Membangun (IDM) Value of village *i* year *t*
DB_{it}	:	Dummy the existence of village BUMDes *i* year *t*, worth one if there are BUMDes and worth 0 if there are no BUMDes
$DB_{it} * SOS$	:	The variable of interaction between the existence of the field of social enterprises and the existence of village BUMDes *i* year *t*
$DB_{it} * ECO$	:	The variable of interaction between the existence of economic business fields and the existence of village BUMDes *i* year *t*
$DB_{it} * LKG$	:	The variable of interaction between the existence of environmental business fields and the existence of village BUMDes *i* year *t*
X_{it}	:	Control variables consisting of the village fund, village head education, population, and social capital
β_0	:	Constant
δ_i	:	Individual *Fixed Effect*
η_t	:	Year *Fixed Effect*
i	:	Village
t	:	Year
ε_{it}	:	*Error term*

IV. Results, Analysis, and Discussions

4.1. Descriptive Statistics

The merging of village codes from each ministry uses an ID in the form of a 10-digit village code. Overall, the authors managed to match data for 74,949 villages for all variables in 2018–2020. Table 1 summarizes the statistical research variables from 2018–2020, divided by the characteristics of villages with BUMDes and villages that do not have BUMDes.

Table 1. Descriptive Statistics of BUMDes Villages and Non-BUMDes Villages in 2018-2020

Variables	BUMDes Village		Non-BUMDes Village	
	Observation	Mean	Observation	Mean
IDM Value	187.319	0,6310	37.528	0,5208
BUMDes Business in the Social Sector	187.319	26%	37.528	-
BUMDes Business in the Economic Sector	187.319	66%	37.528	-
BUMDes Business in the Environmental Sector	187.319	8%	37.528	-
Village Fund (million)	187.319	Rp861	37.528	Rp824
Village Head Education	187.319	92%	37.528	71%
Population (thousands)	187.319	3,856	37.528	1,743
Social Capital	187.319	98%	37.528	96%

Source: Ministry of Village PDTT.

Table 1 shows that villages with BUMDes have a higher average IDM value than villages without BUMDes. Villages with BUMDes have an average IDM value of 0.6310, and villages that do not have BUMDes have an average IDM value of 0.5208. The average value of the Social Resilience Index (IKS), Economic Resilience Index (IKE), and Environmental Resilience Index (IKL) is higher for villages that have BUMDes than villages that do not have BUMDes. When compared among the three resilience indicators, villages with BUMDes and villages that do not have BUMDes both have a low proportion of IKE values when compared to IKS and IKL values. It indicates that both BUMDes villages and non-BUMDes villages need a lot of support from the government for village economic resilience.

Based on business fields, as many as 66% are economic businesses, followed by social and environmental businesses. Table 1 shows that until 2020, villages with BUMDes had an average village fund of IDR 861 million. The value of the village fund is greater than the

value of village funds obtained by villages that do not have BUMDes of Rp 824 million. Until 2020, an average of 92 percent of village heads in villages with BUMDes have completed their education up to high school level and above, which is higher than in villages that do not have BUMDes, where only 71 percent of village heads have completed their education at the high school level and above.

Based on the population aspect in 2018–2020, it can be seen that the average number of people in villages with BUMDes is higher at 3,856 compared to villages that do not have BUMDes, which is 1,743 people. A larger population can be a potential market for BUMDes business units. Social capital in the community, in the form of mutual assistance, is still well maintained in rural areas. Villages that have BUMDes and do not have BUMDes, where the percentage of social capital until 2020 is above 95 percent.

4.2. Overview of Village Development Index (IDM)

According to the Ministry of Villages PDTT Regulation No. 2/2016, the IDM is a composite index formed from three dimensions: social (IKS), economic (IKE), and environmental/ecological (IKL).

Specifically, the resulting Village Development Index (IDM) can be used to:

1. As a database (baseline) of village development as a basis for measuring and assessing village progress and independence;
2. As input material in formulating strategic issues and main problems related to village community development and empowerment;
3. As an input for achieving national development targets,
4. The instruments in the coordination framework between ministries and institutions and regional and village governments to effectively achieve national development targets.

The IDM consists of 23 variables and 54 indicators with the following details:

1) The Social Resilience Index consists of the Health Dimension (health services, community empowerment, and health insurance), Social Capital Dimension (social solidarity, sense of security of the population, having tolerance, Settlement Dimension (social welfare, indicators of access to sanitation, access to clean water, access to information, access to electricity, and communication) and Education Dimension (access to primary, secondary, knowledge, and non-formal education).
2) The Economic Resilience Index consists of the Economic Dimension (diversity of village community production, access to financial and credit institutions, availability of trade service centers, access to distribution/logistics, regional openness, and economic institutions).
3) The Environmental / Ecological Resilience Index consists of the Ecological Dimension (environmental quality, disaster-prone potential, and disaster response).

The success of village development can be shown by the development of village independence status as measured by the Village Development Index (IDM). Figure 4.1 shows the average IDM value from 2018–2020. In 2018, the average IDM value was at 0.5866, increased to 0.6162 in 2019, and increased again in 2020 to 0.6352. It shows a positive direction for village development.

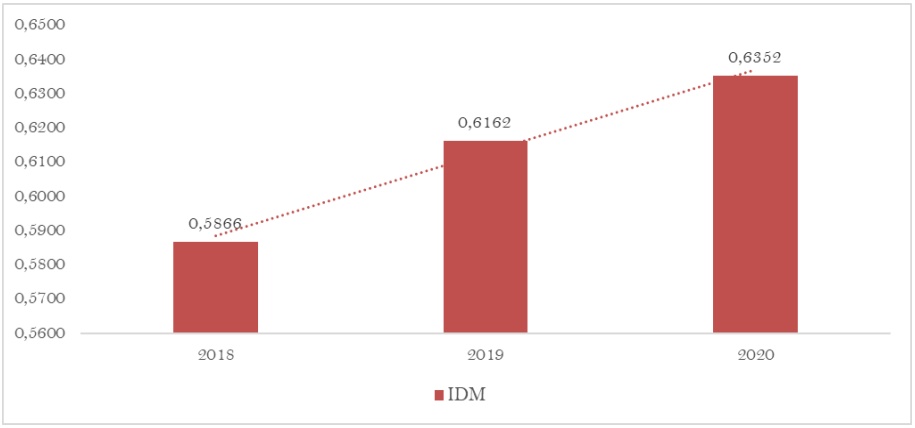

Figure 1. IDM value in 2018-2020

Source: Ministry of Village PDTT data. Processed.

Figure 2 displays the IDM value by island division, with Java having the highest IDM value at 0.6914 and Maluku and Papua having the lowest IDM value at 0.5022. It shows that there is still inequality between Java and non-Java, especially in Maluku and Papua.

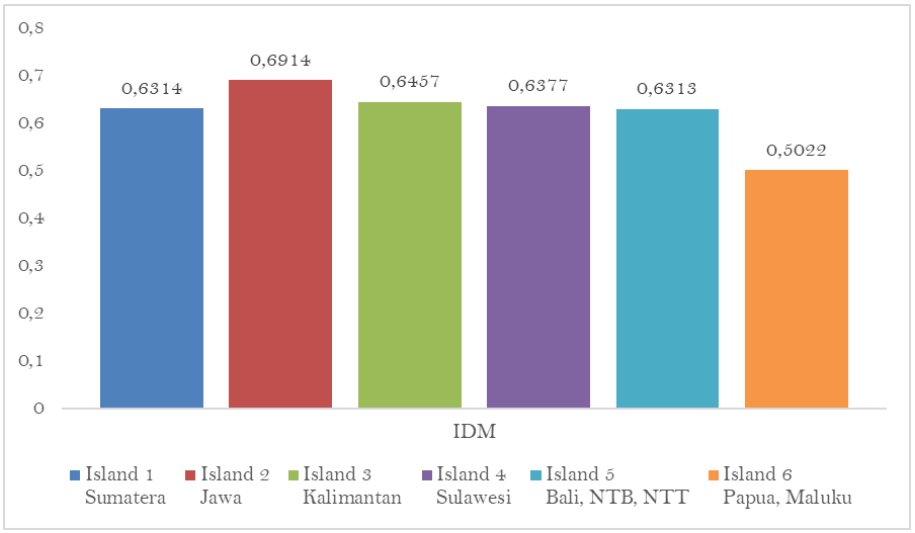

Figure 2. IDM value on each Island in Indonesia in 2020

Source: Ministry of Village PDTT data. Processed.

4.3. Overview of Village-Owned Enterprises (BUMDes)

BUMDes as an economic institution in rural areas has intensified since the issuance of the Village Law in 2014. At the beginning of the rollout of village funds in 2014, rural development focused more on physical development, such as rural infrastructure development. In 2018, rural development began to focus on non-physical development, such as village community empowerment. The number of BUMDes in Indonesia in 2018 was

61,606, then increased to 62,646 in 2019, and in 2020 continued to increase to 63,067. Figure 3 shows that by 2020, 84% of villages already have BUMDes, and 16% do not yet have BUMDes.

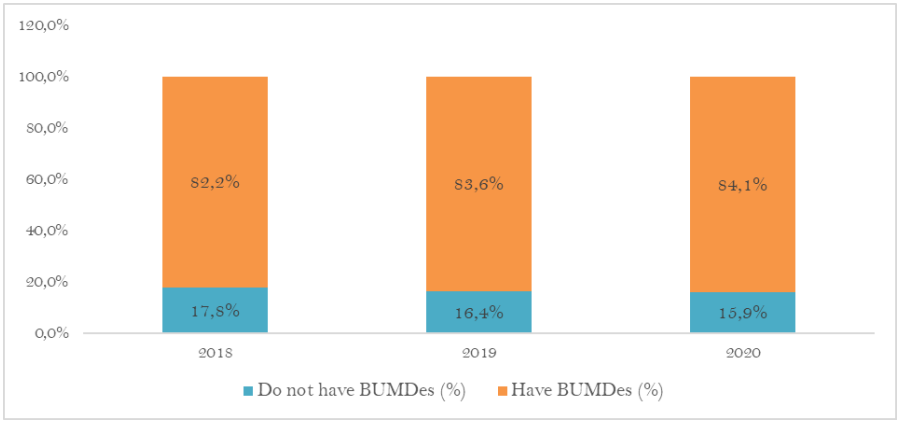

Figure.3 The number of BUMDes in Village in Indonesia in 2018-2020

Source: Ministry of Village PDTT data. Processed

Based on Figure 4, the most significant number of BUMDes is in Java, with 21,442 BUMDes, and the lowest number is in Maluku and Papua, with 3,165 BUMDes. This shows that the eastern part of Indonesia needs to be the focus of BUMDes' development. BUMDes can manage various business sectors, including social, economic, and environmental.

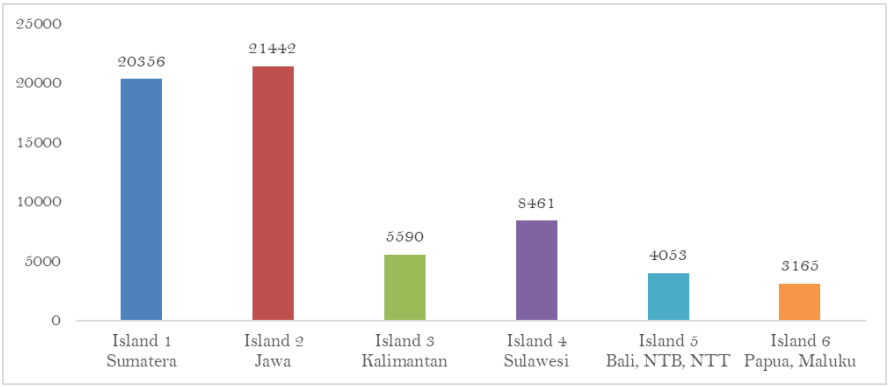

Figure.4 The number of BUMDes in Indonesia on each Island in 2018-2020

Source: Ministry of Village PDTT data. Processed

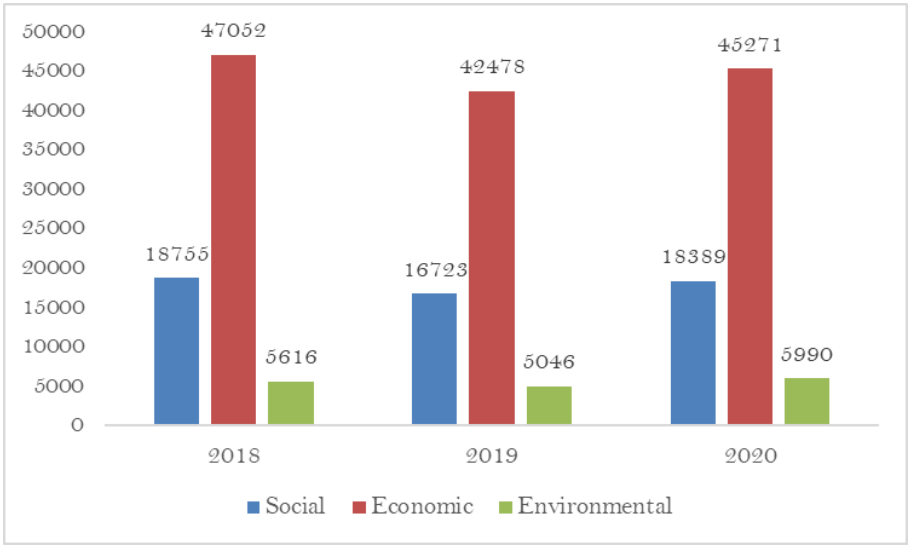

Figure 5. BUMDes Business Fields in 2018-2020

Source: Ministry of Village PDTT data. Processed

Figure 5 shows the business sectors managed by BUMDes. Figure 5 clearly shows that BUMDes manages most of the economic business sector—which has a total of 45,271 units—while the social business sector has 18,389 units and the environmental business sector has 5,990 units.

4.4. Estimation Results

4.4.1. Estimation of the Effect of Village-Owned Enterprises (BUMDes) on the Village Development Index (IDM) Value

This research has five models of estimation. The first model is a basic model regression without using control variables; the second model is a regression model by including the interaction variable of BUMDes and its business field; the third model is a regression by including interaction variables and control variables; the fourth model is a regression model by including interaction variables and control variables with cluster standard errors; and the fifth model is a regression model by including interaction variables and control variables with cluster standard errors and time-fixed effects. It aims to test the consistency of the direction and significance level of the correlation between the presence of BUMDes and its business field on the IDM value. Table 2 displays the coefficients of the dependent, independent, and control variables used in the study.

Table 2. Regression Results of BUMDes and IDM Panel for 2018-2020

	(1)	(2)	(3)	(4)	(5)
	FE1	FE2	FE3	FE4	FE5
dummy	0.048794***	0.048877***	0.036492***	0.036492***	0.014819***

BUMDes	(0.001531)	(0.001703)	(0.001652)	(0.003955)	(0.003596)
BUMDes		-0.004641***	-0.002593*	-0.002593	-0.000491
Social		(0.001563)	(0.001512)	(0.002847)	(0.002815)
BUMDes		-0.007782***	-0.000234	-0.000234	0.010631***
Economy		(0.001035)	(0.001004)	(0.003605)	(0.003082)
BUMDes		0.013203***	0.010977***	0.010977***	0.005650*
Environment		(0.002214)	(0.002142)	(0.003611)	(0.003342)
Village Fund			0.000140***	0.000140***	0.000012**
			(0.000001)	(0.000014)	(0.000005)
Head Village			0.005863***	0.005863***	0.000227
Education			(0.000701)	(0.001134)	(0.001117)
Population			0.000643***	0.000643***	0.000045
			(0.000103)	(0.000142)	(0.000108)
Social Capital			0.009004*** (0.001678)	0.009004*** (0.002168)	0.003034 (0.002888)
2018bn.					.
					.
2019					0.024493***
					(0.004046)
2020					0.038216***
					(0.007205)
_cons	0.572036***	0.576752***	0.446193***	0.446193***	0.549921***
	(0.001281)	(0.001426)	(0.002511)	(0.011993)	(0.007303)
N	224847	224847	224847	224847	224847

r2	0.006733	0.007455	0.071144	0.071144	0.199532
r2_a	-0.489904	-0.488850	-0.393352	0.071111	0.199493

Standard errors in parentheses

* p < .1, ** p < .05, *** p < .01

Description: (1) estimation results without control variables, (2) estimation results with BUMDes business control variables, (3) estimation results with BUMDes business control variables, Village Fund, Village Head Education and Population, (4) estimation results with BUMDes business control variables, Village Fund, Village Head Education and Population and cluster standard error at the Regency level, (5) estimation results with BUMDes business control variables, Village Fund, Village Head Education and Population Variables and cluster standard errors at the Regency level and Year Fixed Effect.

Source: data processing result with StataMP17.

In Table 2, the regression results from models one to five show a consistent direction regarding the correlation of the presence of BUMDes to the IDM value. Adding the time-fixed effect into model five makes the adjusted R-squared value more significant. Therefore, model five is the best estimation model in this study. The regression results based on model five show that the presence of BUMDes is positively correlated and statistically significant at α =1% to the IDM value with a coefficient of 0.0148. It indicates that villages with BUMDes have a higher average IDM of 0.0148 points than villages without BUMDes. Looking further, BUMDes, in the economic and environmental sectors, are positively and significantly correlated to the IDM value compared to social business sectors. Furthermore, the control variables include village fund, village head education, population, and social capital. The estimation results show that the village fund positively and significantly correlates with village development.

The positive and significant influence of BUMDes on village development is in line with the results of research (Steiner & Atterton, 2015), which shows that Social Enterprise (SE) in the form of rural institutions that also have economic and social goals, such as BUMDes, can improve social, economic, and environmental resilience in a case study in South Australia. SE positively influences community economic resilience through village income, providing added value, increasing community cohesion, and creating jobs for rural communities (Steiner & Teasdale, 2019). SE can also drive local development through social innovation by providing products, services, and infrastructure or assets that are difficult for rural communities to access (Steiner *et al.*, 2023). SE also plays a positive role in providing goods and, or services to meet the needs of rural communities (Olmedo *et al.*, 2021).

The positive influence of BUMDes on village development in Indonesia based on the results of this study is also in line with the findings of Puri & Khoirunurrofik (2021), who found that villages with BUMDes have a more significant influence than villages without BUMDes in improving the economies of village communities. BUMDes, as a village enterprise, has a positive effect on micro and small industries, saving and loan cooperatives, farming shops, and sales kiosks. The positive impact of BUMDes is also in line with the findings of Iftitah & Wibowo (2022), which state that capital participation for BUMDes can significantly and positively affect the value of IDM in Gowa Regency, which manages markets in the village and provides clean water, channel credit, and distribution services.

Although the BUMDes social business sector in the estimation results has not shown a significant contribution to encouraging village development, its existence has excellent potential in the long-term considering that, in addition to economic value, the main focus of BUMDes as village social entrepreneurship also includes a social mission (Besley & Ghatak, 2017). The social benefits of BUMDes will be prioritized through its contribution to providing social services such as necessities, clean water facilities, waste management, and employment for residents (Widiastuti *et al.*, 2019). BUMDes Abiantuwung Winangun in Tabanan Regency, Bali, is one of Indonesia's most successful BUMDes, positively impacting the village economy. It has been able to change the consumptive pattern of villagers into a productive pattern. The most noticeable impact is the reduction in unemployment as villagers start to undertake creative business activities and small businesses following the business fields run by the BUMDes (Febryani *et al.*, 2018).

Another example is BUMDes Amarta in Pandowoharjo Village, which provides social benefits through waste management. The business runs through a waste collection model by building partnerships with independent waste collectors. Inorganic waste is sold to waste collectors, while inorganic waste is helpful for fertilizer. The social benefit approach in developing BUMDes succeeded in convincing the community that BUMDes can show positive impacts, including environmental sustainability, provision of employment, increasing partnership networks with the private sector and banks, as well as business expansion in the form of MSMEs selling local village products, organic fertilizer manufacturing businesses, and organic plant products (Nurussa'adah & Santoso, 2022).

BUMDes could form village entrepreneurs who can drive the village economy, which can attract investment to reduce dependence on government assistance (Khoirunurrofik, 2020). BUMDes, as a village-based economic organization, has a close relationship with and is in line with neo-endogenous rural development, where there is an exploration and utilization of local resources to meet the needs of local communities involving bottom-up and top-down forces (Gkartzios & Lowe, 2019). In this context, the development of BUMDes involves the cooperation of the village government and the central government.

BUMDes can function as a tool to improve the empowerment and welfare of villagers through the creation of a business ecosystem that can encourage the development of community economic activities, foster an entrepreneurial spirit, and encourage the community to seize business opportunities that can be developed (Kania *et al.*, 2021). BUMDes operations are not only limited to economic benefits but also include support for improving village community welfare services. BUMDes is required to optimize business unit utilization of the economy so that the community becomes independent and less dependent on government assistance (Badaruddin *et al.*, 2021).

BUMDes has to proactively make various innovation breakthroughs to attract investors to invest their capital so that BUMDes can be financially independent. It is in line with the research of Cagarman *et al.* (2020) and Defourny & Nyssens (2021), which state that social enterprises require innovation to attract investment, diversify their funding sources, and rely on their income for business continuity. Based on the research results of Arifin *et al.* (2020), the number of BUMDes that have consistently increased has yet to be matched by optimal utilization from the village community. Therefore, there is a need for village government support so that BUMDes can contribute significantly to the village economy (Nuraini *et al.*, 2021).

The success of village entrepreneurship will be related to the support of local figures and leaders. In the context of BUMDes, the village head is the policyholder for village development. Alignment between the objectives of BUMDes and the village government will facilitate BUMDes's development of its business units (Rutherford *et al.*, 2016). BUMDes and Village Government can overcome these challenges through business planning, HR training support relevant to business planning, involving the community in determining the BUMDes business model, and developing transparent, accountable, and targeted village economic data and information systems (Steiner & Teasdale, 2019; Arifin *et al.*, 2020; Steiner *et al.*, 2023; Musinguzi *et al.*, 2023; Espasandín-Bustelo *et al.*, 2023; Budiantoro *et al.*, 2023).

In the long run, social entrepreneurship is important to success in various dimensions and financial independence (Civera *et al.*, 2020). If BUMDes' excessive dependence on external support, such as village funds, has a negative impact, it will reduce its entrepreneurial spirit. Therefore, BUMDes, as a business entity in rural areas, must have financial independence as its main goal so that the existence of village funds can be optimized for other village development programs.

4.4.2. Estimation of the Effect of Village-Owned Enterprises (BUMDes) on the Village Development Index (IDM) Value on Each Island

The estimation consists of six regions, namely Sumatra (Code 1), Java (Code 2), Kalimantan (Code 3), Sulawesi (Code 4), Bali and Nusa Tenggara (Code 5), and finally, Maluku and Papua (Code 6). The estimation includes village fund, village head education, population, and social capital as control variables

Table 3. Regression Results of BUMDes and IDM Panel for 2018-2020 on each Island

	(1)	(2)	(3)	(4)	(5)	(6)
	Sumatera	Jawa	Kalimantan	Sulawesi	Bali dan Nusa Tenggara	Maluku dan Papua
Dummy	0.009149***	0.002383	0.013804	0.005770	0.003798	0.059006***
BUMDes	(0.004023)	(0.005358)	(0.008298)	(0.004333)	(0.016768)	(0.015412)
BUMDes	0.003711	-0.002133	0.008963*	0.001566	-0.045099*	0.000594
Social	(0.003715)	(0.002953)	(0.005048)	(0.005021)	(0.026664)	(0.011171)
BUMDes	0.010900***	0.013273**	0.006095	0.016670***	0.014687*	-0.029453***
Economy	(0.003222)	(0.005859)	(0.004896)	(0.002958)	(0.008062)	(0.010325)
BUMDes	0.005210	0.002272	0.018189*	-0.008249	0.045763*	0.025362*

	(1)	(2)	(3)	(4)	(5)	(6)
	Sumatera	Jawa	Kalimantan	Sulawesi	Bali dan Nusa Tenggara	Maluku dan Papua
			*		**	*
Environment	(0.005298)	(0.004350)	(0.008049)	(0.009562)	(0.014649)	(0.012178)
Village	0.000043***	0.000001	0.000006	0.000023***	0.000038	-0.000010
Fund	(0.000013)	(0.000006)	(0.000014)	(0.000008)	(0.000023)	(0.000021)
Head Village	0.000660	0.000347	-0.002614	-0.000261	-0.007995	0.002233
Education	(0.001825)	(0.001485)	(0.002491)	(0.003255)	(0.005496)	(0.003457)
Population	0.000005	0.000026	0.000144	0.000270	0.000649	0.000089
	(0.000337)	(0.000119)	(0.000482)	(0.000349)	(0.000442)	(0.001354)
Social	0.001754	0.005861	0.008254	0.003072	-0.016082	0.004185
Capital	(0.002638)	(0.003810)	(0.005606)	(0.006098)	(0.013065)	(0.007543)
Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes
Year						
_cons	0.536106***	0.637292***	0.538972***	0.542488***	0.547173***	0.440066***
	(0.010552)	(0.007995)	(0.019864)	(0.009300)	(0.025663)	(0.018142)
N	69132	67425	19845	26238	13971	28236
r2	0.223025	0.115147	0.405630	0.344946	0.230750	0.173463
r2_a	0.222912	0.115016	0.405330	0.344697	0.230199	0.173170

Standard errors in parentheses

* $p < .1$, ** $p < .05$, *** $p < .01$

Notes: cluster standard errors at the Regency level.

Source: data processing result with StataMP17.

Table 3. shows that BUMDes has a positive correlation and statistically significant results with the IDM value, specifically for Sumatra and Maluku-Papua islands. The support of economic business sectors has further increased the value of IDM on several islands in Indonesia. BUMDes with economic business fields show positive and significant results, including Sumatra, Java, Sulawesi, Bali, and Nusa Tenggara regions. In contrast, the region of Maluku Papua has yet to show significant results for the economic business sector. On the other hand, BUMDes in the Kalimantan region shows a positive and significant relationship between social and environmental enterprises. BUMDes in Bali, Nusa Tenggara, and Maluku-Papua regions also show positive and significant results for the environmental business sector. In contrast, BUMDes in Bali and Nusa Tenggara regions have not shown a positive relationship for the social sector. Papua also has yet to show a positive relationship between the existence of BUMDes in the economic sector and the value of IDM.

Village entrepreneurship can form added value based on local potential, including peculiarities, resources, and characteristics that empower local labor and services (Pato & Teixeira, 2016). Geographical differences in an area will determine different planning patterns between village areas with different emphases according to local conditions (Han *et al.*, 2021). Geographical aspects in the form of landforms and differences in natural resources will affect the direction of development of BUMDes. Islands with abundant natural resources in the agricultural sector tend to have BUMDes engaged in agriculture. In contrast, islands with natural beauty advantages tend to have BUMDes engaged in tourism. Tourism businesses, as a source of local livelihood, can provide favorable economic, social, and environmental benefits for the welfare of rural communities (Sheldon *et al.*, 2017; Dahles *et al.*, 2020).

V. Conclusion and Recommendation

This research is an empirical study that aims to show that the presence of BUMDes and the type of business field positively correlate with the Village Development Index (IDM) value, which measures the level of village development. The descriptive analysis results show that villages with BUMDes tend to have a higher average IDM value than villages without BUMDes. Villages with BUMDes tend to have more significant support from village funds, village head education, population, and social capital. The estimation method for this study uses two-way fixed effect panel data regression with sample data from villages throughout Indonesia for the period 2018–2020. The estimation results show that BUMDes has a positive and significant relationship with the level of village development, where the average IDM value of villages with BUMDes is higher than that of villages without BUMDes. BUMDes with economic and environmental business fields also have a positive and significant relationship with the level of village development, where the average IDM value of villages that have BUMDes with economic and environmental business fields is higher than that of villages without BUMDes with economic and environmental business fields.

The results show that the village fund, as a control variable, shows a positive and significant correlation to the IDM value. The positive role of BUMDes as a village-based economic organization aligns with neo-endogenous rural development theory. Exploration and utilization of local resources to meet the needs of local communities involve bottom-up forces (Local Government) and top-down forces (Central Government). BUMDes, as a form

of village social entrepreneurship, is closely related to social, economic, and environmental resilience as part of village development.

Geographical and landscape differences will determine the pattern of BUMDes development in each village in Indonesia. Therefore, BUMDes development can be carried out based on the potential and characteristics of each village. The results of this study also identify that the role of BUMDes differs between islands in Indonesia. The estimation results for each Island show that the presence of BUMDes correlates positively to the IDM value, specifically for Sumatra and Maluku-Papua Islands. The estimation results of BUMDes presence show statistically significant results. BUMDes, in the economic business field, shows positive and significant results on the Sumatra, Java, Sulawesi, Bali, and Nusa Tenggara islands. BUMDes in social business fields show positive and significant results on Kalimantan Island. In contrast, BUMDes, which has environmental business fields, shows positive and significant results in Kalimantan, Bali, Nusa Tenggara, and Maluku, Papua Islands.

The results show that the village fund control variable shows a positive and significant correlation to the IDM value. Based on the conclusions previously described, the policy suggestions for the government are: the Central Government and Village Government can assist villages that already have BUMDes so that they can focus their business activities following the potential of the region from social, economic, and environmental aspects and the Central Government and Village Government can assist the villages that do not yet have BUMDes through village potential mapping, business planning, and Human and Resource training in order to run the BUMDes better.

The limitations in this study consist of several things, namely: the period used in this study is relatively short, which is only three years, so the estimation results obtained have not shown too much influence; this study has limitations in terms of the existence of BUMDes, which has not focused on the aspects of capital and income. This study only identifies the existence of BUMDes and does not include details on the classification of the progress of each BUMDes due to the limited data and information obtained. The use of a dummy for the presence or absence of BUMDes in each village as a reference for treatment intensity is not sufficient to prove that BUMDes contribute significantly to village development; this study still has limitations in overcoming endogeneity issues even though the estimation by using the Fixed Effect Panel Model. The results are still potentially biased, which may lead to reverse causality between the independent and dependent variables. In other words, the presence or absence of BUMDes can affect the IDM value of a village, and the IDM value of a village can affect the presence or absence of BUMDes.

Based on the previously described research limitations, further research can implement an empirical analysis with an Instrumental Variable approach that can overcome endogeneity issues in the research model to minimize the reverse causality relationship between the independent and dependent variables. The following future research can add more data variables with not only the existence of BUMDes and their business fields but also equipped with data on the amount of capital, human resources of BUMDes managers, income, and profits from BUMDes to strengthen and sharpen the results of the analysis of BUMDes management.

References

Adit, A., & Qibthiyyah, R. M. (2022). Dampak Belanja Desa dan Modal Sosial terhadap Industri Perdesaan. *Indonesian Treasury Review: Jurnal Perbendaharaan, Keuangan Negara Dan Kebijakan Publik*, *7*(2), 145–159.

Agunggunanto, E. Y., Arianti, F., Kushartono, E. W., Pengembangan, D., Mandiri, D., Pengelolaan, M., Usaha, B., Desa, M., Fitrie,), Wibowo, A. E., & Darwanto, K. (2016). *Pengembangan Desa Mandiri melalui Pengelolaan Badan Usaha Milik Desa (BUMDes)*.

Amri, K. (2019). Bumdes Acceleration Towards Mandiri Village. *Iapa Proceedings Conference*, pp. 268–281.

Ansari, B., Mirdamadi, S. M., Zand, A., & Arfaee, M. (2013). Sustainable Entrepreneurship in Rural Areas. *Research Journal of Environmental and Earth Sciences*, *5*(1), 26–31.

Arifin, B., Wicaksono, E., Tenrini, R. H., Wardhana, I. W., Setiawan, H., Damayanty, S. A., Solikin, A., Suhendra, M., Saputra, A. H., Ariutama, G. A., Djunedi, P., Rahman, A. B., & Handoko, R. (2020). Village fund, Village-Owned Enterprises, and Employment: Evidence from Indonesia. *Journal of Rural Studies*, *79*, 382–394.

Atterton, J. (2007). The "strength of weak ties": Social networking by business owners in the Highlands and Islands of Scotland. *Sociologia Ruralis*, *47*(3), 228–245.

Badaruddin, B., Kariono, K., Ermansyah, E., & Sudarwati, L. (2021). Village community empowerment through Village-Owned Enterprises based on social capital in North Sumatra. *Asia Pacific Journal of Social Work and Development*, *31*(3), 163–175.

Baltagi, B. H. (2005). *Econometric Analysis of Panel Data Third edition*. John Wiley & Sons Inc.

Besley, T., & Ghatak, M. (2017). Profit with purpose? A theory of social enterprise. *American Economic Journal: Economic Policy*, *9*(3), 19–58.

Bhattacharyya, S., Roy Burman, R., Padaria, R., & Paul, S. (2018). Model Villages Led Rural Development: A Review of Conceptual Framework and Development Indicators. *Journal of Community Mobilization and Sustainable Development*, *13*(3), 513–526.

Bosworth, G., Annibal, I., Carroll, T., Price, L., Sellick, J., & Shepherd, J. (2016). Empowering Local Action through Neo-Endogenous Development; The Case of LEADER in England. *Sociologia Ruralis*, *56*(3), 427–449.

Budiantoro, R. A., Aji, M. R. W., Prayogi, J., & Susanti, A. (2023). SI Desa (Sistem Informasi Desa): Initiation of an Integrated Village Economic Information System and Data Management by the Provincial Government of East Java. *Jurnal Bina Praja*, *15*(2), 233–247. https://doi.org/10.21787/jbp.15.2023.233-247

Bureekhampun, S., & Maneepun, C. (2021). Eco-Friendly and Community Sustainable Textile Fabric Dyeing Methods from Thai Buffalo Manure: From Pasture to Fashion Designer. *SAGE Open*, *11*(4).

Cagarman, K., Kratzer, J., von Arnim, L. H., Fajga, K., & Gieseke, M. J. (2020). Social entrepreneurship on its way to significance: The case of Germany. *Sustainability (Switzerland)*, *12*(21), 1–13.

Civera, C., Cortese, D., Mosca, F., & Murdock, A. (2020). Paradoxes and strategies in social enterprises' dual logics enactment: A csQCA between Italy and the United Kingdom. *Journal of Business Research*, *115*, 334–347.

Dahles, H., Verver, M., Khieng, S., Manders, I., & Schellens, N. (2020). Scaling Up Social Enterprise: Predicament or Prospect in a Comparative Perspective. *Journal of Social Entrepreneurship*, *11*(3), 317–342.

Defourny, J., & Nyssens, M. (2021). *Social Enterprise in Central and Eastern Europe; Theory, Models and Practice*.

Díaz-Foncea, M. &, & Marcuello, C. (2012). Social enterprises and social markets: Models and new trends. *Service Business*, *6*(1), 61–83.

Huruta, A. D., Kundhani, Y., & Manurung, C. R. (2020). The development of village-owned enterprises: Lessons learned from Ponggok Village. *Masyarakat, Kebudayaan Dan Politik*, *29*(4).

Elkafrawi, N., Roos, A., & Refai, D. (2022). Contextualising rural entrepreneurship– A strong structuration perspective on gendered-local agency. *International Small Business Journal: Researching Entrepreneurship*, *40*(8), 1019–1040.

Espasandín-Bustelo, F., Rufino-Rus, J. I., & Rodríguez-Serrano, M. Á. (2023). Innovation and performance in social economy enterprises: The mediating effect of legitimacy for customers. *Journal of Business Research*, *158*.

Farmer, J., De Cotta, T., McKinnon, K., Barraket, J., Munoz, S.-A., Douglas, H., & Roy, M. J. (2016). Social enterprise and wellbeing in community life. *Social Enterprise Journal*, *12*(2), 235–254.

Febryani, H., Nurmalia, R., Made Indra Lesmana, I., Kadek Wiwik Ulantari, N., Putu Yuliani Puspa Dewi, D., & Rizky, N. (2018). Keberadaan Badan Usaha Milik Desa (Bumdes) Sebagai Penguatan Ekonomi Desa Abiantuwung. *Jurnal Ilmiah Akuntansi dan Humanika*, *8*(1).

Feher, A. (2014). Development Opportunities of Rural Entrepreneurship by Participating in Training Projects. *Research Journal of Agricultural Science*, *46*(4), 46–51.

Firdaus, S. (2018). Fenomena Elite Capture dalam Pengelolaan Badan Usaha Milik Desa (BUMDES). *Politika: Jurnal Ilmu Politik* , *9*(2), 20–37.

Galindo-Martín, M. A., Castaño-Martínez, M. S., & Méndez-Picazo, M. T. (2020). The relationship between green innovation, social entrepreneurship, and sustainable development. *Sustainability (Switzerland)*, *12*(11).

Gkartzios, M., & Lowe, P. (2019). Revisiting neo-endogenous rural development. In *The Routledge Companion to Rural Planning* (pp. 159–169). Routledge.

Gkartzios, M., & Scott, M. (2014). Placing housing in rural development: Exogenous, endogenous and neo-endogenous approaches. *Sociologia Ruralis*, *54*(3), 241–265.

Gujarati, D. N., & Porter, D. (2009). *Basic Econometrics*. McGraw-Hill International Edition.

Han, W., Wei, Y., Cai, J., Yu, Y., & Chen, F. (2021). Rural nonfarm sector and rural residents' income research in China. An empirical study on the township and village enterprises after ownership reform (2000-2013). *Journal of Rural Studies*, *82*, 161–175.

Hsiao, C. (2007). Panel data analysis advantages and challenges. *Test*, *16* (1), 1–22.

Iftitah, A. E., & Wibowo, P. (2022). Pengaruh Dana Desa, Alokasi Dana Desa, Dan Pendapatan Asli Desa Terhadap Indeks Desa Membangun Di Kabupaten Gowa. *Jurnal Ilmu Pemerintahan Widya Praja*, *48*(1), 17–36.

Kania, I., Anggadwita, G., & Alamanda, D. T. (2021). A new approach to stimulate rural entrepreneurship through village-owned enterprises in Indonesia. *Journal of Enterprising Communities*, *15*(3), 432–450.

Khoirunurrofik, K. (2020). *Kerjasama Antar Desa Bagi Penguatan Inovasi dan Kewirausahaan Menuju Kemandirian Ekonomi Desa*.

Larasdiputra, G. D., Anggiriawan, D. B., Kawisana, B., & Putra, T. (2019). The Role of Village-Owned Enterprises in Increasing the Rural Economy. *International Journal of Advances in Social and Economics*, *1*(2), 60–66.

Lowe, P., Ray, C., Ward, N., Wood, D., & Woodward, R. (1998). Participation In Rural Development: A Review Of European Experience Centre For Rural Economy Research Report Participation In Rural Development*: A Review of European Experience*.

Masbiran, V. U. K., Murliasari, R., Afriyanni, A., & Wulandari, S. N. (2021). Constraint and Strategies Element for Increasing Effectiveness Village Fund Management Based Interpretive Structural Modelling. *Jurnal Bina Praja*, *13*(3).

Meador, J. E. (2019). Reaching rural: Identifying implicit social networks in community development programs. *Journal of Rural Studies*, *68*, 285–295.

Ministry of Finance. (2022). *Proses Bisnis Perencanaan, Penganggaran dan Kebijakan penyaluran Dana Desa Focus Group Discussion (FGD) Secondment Evaluasi Proses Bisnis Belanja Negara Agustus 2022*.

Ministry of Villages, Development of Disadvantaged Regions and Transmigration (PDTT), (2020). *Kemendes PDTT Targetkan 10.000 Desa Tertinggal Menjadi Desa Berkembang*. 11 Januari 2023. https://kemendesa.go.id/berita/view/detil/3505/kemendes-pdtt-targetkan-10000-desa-tertinggal-menjadi-desa-berkembang.

Ministry of Villages, Development of Disadvantaged Regions and Transmigration (PDTT). (2020). *Surat Keputusan Nomor 303 Tahun 2020 tentang Status Kemajuan dan Kemandirian Desa*.

Musinguzi, P., Baker, D., & Villano, R. A. (2023). Interrelationships amongst critical success factors and rural social enterprises' performance in a developing country context. *Journal of Rural Studies*, *100*.

Nadia, A. &, & Mahi, B. R. (2023). Village Development: Effect of Village Fund and Village Head Education. *Economics Development Analysis Journal*, *12*(2), 141–156.

Nugroho, A., Fajri, Iqbal, R. M., Fadhiela, K., Apriyani, D., Ginting, L. N., & Nurdin, S. (2022). Impacts of village fund on post-disaster economic recovery in rural Aceh Indonesia. *International Journal of Disaster Risk Reduction*, *70*.

Nuraini, H., Larasati, E., Suwitri, S., & Nugraha, H. S. (2021, November). Mobilizing Village-Owned Enterprises (BUMDes) Through Affirmative Development Policies in Rural Areas. In *1st International Conference Of Education, Social And Humanities (INCESH 2021)* (pp. 183-187). Atlantis Press.

Nurussa'adah, E., & Santoso, J. D. (2022). Membangun Kembali Ekonomi Melalui Badan Usaha Milik Desa (Bumdes) (Marketing Communication Melalui Pembuatan Video Compay Profile BUMDes Amarta Pandowoharjo Slemen). *Abdimas Siliwangi*, *5*(02), 303–313.

OECD. (2020). *Geography of Opportunities Policy Highlights Rural Well-being*.

Oi, J. C. (1999). *Two Decades of Rural Reform in China: An Overview and Assessment* (Issue 159).

Olmedo, L., van Twuijver, M., & O'Shaughnessy, M. (2021). Rurality as context for innovative responses to social challenges – The role of rural social enterprises- *Journal of Rural Studies, 99,* 272-283.

Pato, M. L., & Teixeira, A. A. C. (2016). Twenty Years of Rural Entrepreneurship: A Bibliometric Survey. *Sociologia Ruralis*, *56*(1), 3–28.

Regulation of the President of RI Number 18. (2020). *Rencana Pembangunan Jangka Menengah Nasional Tahun 2020-2024*.

Phillipson, J., Tiwasing, P., Gorton, M., Maioli, S., Newbery, R., & Turner, R. (2019). Shining a spotlight on small rural businesses: How does their performance compare with urban? *Journal of Rural Studies*, *68*, 230–239.

Puri, I. T., & Khoirunurrofik, K. (2021). The Role of Village-Owned Enterprises (BUMDES) for The Village Community Economy. *Economics Development Analysis Journal*, *10*(1), 12–21.

Raharjo, T., Wirawan, A., Yudanto, A. A., & Kusmulyono, M. S. (2022). Eksplorasi Faktor-FAktor Kegagalan Badan Usaha Millik Desa. *Eqien - Jurnal Ekonomi Dan Bisnis, 11*(2), 463–477.

Richter, R. (2019). Rural social enterprises as embedded intermediaries: The innovative power of connecting rural communities with supra-regional networks. *Journal of Rural Studies*, *70*, 179–187.

Rokhim, R., Wahyuni, S., Wulandari, P., & Ayu, F. (2017). Analyzing key success factors of local economic development in several remote areas in Indonesia. *Journal of Enterprising Communities*, *11*(4), 438–455.

Saefulrahman, I. (2015). Kepemimpinan, Modal Sosial, dan Pembangunan Desa (Kasus Keberhasilan Pembangunan di Desa Pangauban Kecamatan Cisurupan Kabupaten Garut). *CosmoGov: Jurnal Ilmu Pemerintahan,* 1(1), 149–166.

Sheldon, P. J., Pollock, A., & Daniele, R. (2017). *Social Entrepreneurship and Tourism: Setting the Stage* (pp. 1–18).

Srirejeki, K. (2018). Empowering the Role of Village Owned Enterprise (BUMDes) for Rural Development: Case of Indonesia. *Journal of Accounting, Management, and Economics*, *20*(1), 5–10.

Statistics Indonesia. (2022). *Profil Kemiskinan di Indonesia, Maret 2022, Berita Resmi Statistik No 51/07/Th XXV*. https://www.bps.go.id/id/pressrelease/2022/07/15/1930/persentase-penduduk-miskin-maret-nbsp-2022-nbsp-turun--menjadi-9-54-nbsp-persen---nbsp-.html

Steiner, A., & Atterton, J. (2015). Exploring the contribution of rural enterprises to local resilience. *Journal of Rural Studies*, *40*, 30–45.

Steiner, A., Calò, F., & Shucksmith, M. (2023). Rurality and social innovation processes and outcomes: A realist evaluation of rural social enterprise activities. *Journal of Rural Studies*.

Steiner, A., & Teasdale, S. (2019). Unlocking the potential of rural social enterprise. *Journal of Rural Studies*, *70*, 144–154.

Sudrajat, D. , S. S. , & S. S. (2020). Peran Bumdes Panggung Lestari dalam Pemberdayaan Masyarakat Desa Panggungharjo, Sewon, Bantul. *Jurnal Manajemen Publik & Kebijakan Publik*, *2*(2).

Thanh, L. H., Nhat, L. T., Dang, H. N., Ho, T. M. H., & Lebailly, P. (2018). One Village One Product (OVOP)-A rural development strategy and the early adaption in Vietnam, the case of Quang Ninh Province. *Sustainability (Switzerland)*, *10*(12).

Thelken, H. N., & de Jong, G. (2020). The impact of values and future orientation on intention formation within sustainable entrepreneurship. *Journal of Cleaner Production*, *266*.

Wang, J. (2005). Going Beyond Township and Village Enterprises in Rural China. *Journal of Contemporary China*, *14*(42), 177–187.

Widiastuti, H., Manuhara Putra, W., Rahman Utami, E., & Suryanto, R. (2019). Menakar Tata Kelola Badan Usaha Milik Desa Di Indonesia. *Jurnal Ekonomi Dan Bisnis*, *22*(Oktober), 257–288.

Yang, Y. (2018). Community participation for sustainable rural development: Revisiting South Korean rural modernization of the 1970s. *Community Development Journal*, *53*(1), 61–77.

Yusuf, M., & Khoirunurrofik, K. (2022). The Relationship of Village Funds With Village Economic Development: A Village Level Study in Indonesia. *Jurnal Bina Praja*, *14*(3), 493–504.

Zahra, S. A., Gedajlovic, E., Neubaum, D. O., & Shulman, J. M. (2009). A typology of social entrepreneurs: Motives, search processes, and ethical challenges. *Journal of Business Venturing*, *24*(5), 519–532.

Zulkarnaen, R. M. (2016). Pengembangan Potensi Ekonomi Desa melalui Badan Usaha Milik Desa (Bumdes) Pondok Salam Kabupaten Purwakarta. *Dharmakarya: Jurnal Aplikasi Ipteks Untuk Masyarakat*, *5*(1).