

Causality between Regional Economic Independence and Decentralization on Poverty Alleviation and Community Welfare Mediated by Economic Development



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<https://doi.org/10.18280/ijstdp.170227>

ABSTRACT

Received: 4 January 2022

Accepted: 31 March 2022

Keywords:

economic independence, decentralization, economic development, poverty, welfare, sustainability, SEM, panel data, East Kalimantan

Poverty and welfare are concrete problems that do not end, especially in developing and poor countries. The East Kalimantan Province, which contributes the most to Indonesia's natural wealth, has actually experienced economic and social degradation. This study has the ambition to identify the causality between regional economic independence, decentralization, and regional economic development on poverty alleviation and community welfare in East Kalimantan Province during the 2013-2018 period. Panel data collected from nine objects, then interpreted with Structural Equation Modeling (SEM) technique as an empirical approach to test ten hypotheses. WarpPLS software applied to interpret the data. There are eight findings that are in line with the hypothesis, where regional economic independence has a positive-significant effect on regional economic development, but in fact it has a negative-significant effect on poverty alleviation. Regional economic development has a negative-significant effect on poverty alleviation, but it has a positive-significant effect on community welfare. Regional economic development has mediated the relationship between regional economic independence and decentralization on poverty alleviation and community welfare. In addition, poverty alleviation has a significant negative effect on community welfare, but has mediated the relationship between regional economic development and community welfare. Two conclusions in the new findings are in sharp focus because they contradict the hypothesis, namely that decentralization has a significant negative effect on regional economic development and community welfare. Practical and theoretical contributions apply to reveal the linkages between economic aspects of local development to support sustainability. The refinement of methods, data, variables, and analytical techniques is an important note for the follow-up agenda.

1. INTRODUCTION

A decent community life can achieve prosperity, then we can say the economic changes to affect welfare. The lower the level of decent living will reduce the welfare of the community. The decline in the level of decent living as a decrease in the level of equality or often called poverty, where the poverty rate will reduce the proportion of community welfare [1].

Government spending, particularly the Revenue Sharing Fund (DBH) also influenced welfare. This explains the DBH receipts to fund regional needs that can have a positive impact on community welfare. In addition, regional financial independence can also affect the welfare of regions that can fund regional expenditures. Regional financial capacity can lead to community welfare, as with economic growth explaining the increase in income from the output of goods or services in the economy can prosper the community [2].

In addition, the decline in Gross Domestic Product (GDP) per capita can also threaten welfare and social sustainability. Economic growth and unemployment rate have no significant effect on community welfare, while the poverty rate influences community welfare. Simultaneously, economic growth, unemployment rate, and poverty level have a significant effect on community welfare. As for the results of infrastructure development built by the government, it has not provided

maximum results as expected by the local community in improving the welfare of the surrounding community [3].

The welfare of the people in the East Kalimantan Province (Indonesia), which is represented by the Human Development Index (HDI), and the number of prosperous families whose index scores have improved. In general, the HDI has progressed in the 2013-2018 period, which was originally 73.21 percent, now to 75.83 percent. The human development process in East Kalimantan Province is still of 'high' status. Meanwhile, the indicator for prosperous families during the same period also increased to 374,524 families. However, in 2018, a slight decrease was seen, namely 361,416 families.

Not all countries or regions with the same factors can provide the same results as desired. This depends on several conditions, for example, the geographic and demographic of the country or region. They can achieve the achievement of community welfare, among others, by success in supporting poverty reduction, where the mainstay program of every region in Indonesia, including East Kalimantan, is Direct Cash Assistance (BLT).

Road infrastructure affects poverty alleviation. The existence of road infrastructure, both to be built and under repair, will provide benefits such as more effective transportation access, reduced cost of living because of environment, efficiency, and benefits from economic growth

[2]. Other factors such as unemployment and education, especially the investment environment, also have an influence in reducing poverty rates significantly [4].

The phenomenon of the poverty rate in East Kalimantan Province illustrates that poverty conditions have fluctuated. It is represented that not always the same factors can give the same results to reduce poverty because there are other things that can arise so that they have other affects. As for programs related to poverty alleviation, of course, it also adjusts the conditions of the people in each region.

Economic development exposed to GDP can reduce the number of poverty [4]. Socio-economic growth has a positive impact on the level of financial inclusion, but it has a negative impact on poverty. This shows that socio-economic growth can reduce poverty rates [5].

Regional Original Income (PAD) influenced economic growth, so its increase will provide an increase in economic growth both in the short and long term [6]. However, PAD can also have a negative and significant effect on economic growth, which explains that the increase in its realization does not always affect increasing economic growth.

The Provincial Government of East Kalimantan is very concerned about improving the economic development of the region. As a province with a high regional income value on the island of Kalimantan, this is certainly a distinct advantage. The allocation of government spending expected to support economic growth and improve the quality of human resources through sources of income which are still dominated by the natural wealth of the region, which is dominated by mining and in the provision of infrastructure to access economic activities.

An increase in the community's welfare has not accompanied the success of the macroeconomic sector in East Kalimantan Province, especially regarding managing natural resource products sustainably, meaning that there are still people living in slum squatter houses with school-age children. Who are forced to work to help ease the burden on their parents, which characterizes poverty that still shackles society.

The originality of this research lies in the object of the research variables used based on observations taken from various relevant studies, that there are differences or similarities in the results or findings that have been carried out. Furthermore, it is formed in the modeling of these variables in order to prove and compare the magnitude of the contribution between regional economic independence as PAD and fiscal decentralization as non-tax DBH revenues originating from natural resources. They can highlight it, which one contributes to providing benefits to regional economic development and proves that, in realizing a more prosperous society, one must first start with alleviating the poverty.

We generate the regional economic development construct through three indicators (economic growth index, employment opportunity index, and economic infrastructure index). The percentage of the number of poor people, the poverty depth index, and the poverty severity index represented the poverty alleviation construct. Finally, the social welfare construct includes the human development index, the prosperous family-1, and the prosperous family-2.

2. LITERATURE REVIEW

2.1 Hypothesis development

The relationship between PAD and economic growth shows

a positive or elastic trend [7]. The same results conclude PAD has a significant and positive effect on economic growth [8-10]. Meanwhile, different from the findings [11], that PAD has a significant effect on economic growth, but has a negative coefficient on economic growth [12].

The increase in the realization of PAD, which is quite large, is mostly used to increase the number of employees and wages in regional governments. Financial performance, as measured by the ratio of local government financial independence, has no significant effect on economic growth [13]. Therefore, it makes sense to plan the following hypothesis:

Hypothesis 1 (H1): regional economic independence can affect regional economic development.

PAD can reduce poverty [14]. Rohima et al. [4], where the amount of regional income affects poverty reduction, presented the results of a similar study. It is logical to design the following hypothesis:

Hypothesis 2 (H2): regional economic independence can affect poverty alleviation.

Comparing the experiences of various developing countries consistently finds strong evidence that rapid and sustainable growth is the single most important way to reduce poverty. A typical estimate from this cross-country study is that a 10 percent increase in a country's median income will reduce the poverty rate by between 20 percent and 30 percent [15]. Economic growth accompanied by an increase in the number of poor people certainly invites several questions, such as who enjoys economic growth and whether increased productivity or the use of production factors, and others caused economic growth [16].

It concentrated growth in certain sectors, while in other areas, the growth is relatively slow, making it difficult to reduce poverty. The level of poverty and economic growth has a significant effect on the HDI in Indonesia and economic growth has a significant effect on the HDI in Indonesia [17].

Research on individual countries and country groups emphasizes the central role of growth in driving the pace of poverty reduction. For example, a flagship study of 14 countries in the 1990s found that over the past decade, poverty fell in 11 countries with significant growth and increased in three countries with low or stagnant growth. An average of 1 percent increase in income per capita reduces poverty by 1.7 percent [18].

Other countries with impressive reductions during this period include El Salvador, Ghana, India, Tunisia and Uganda, each with a reduction in poverty rates of between three and six percent per year. Driving this overall reduction in poverty is the rebound in growth that began in most countries in the mid-1990s. The average GDP growth rate for the 14 countries was 2.4 percent per year between 1996 and 2003. Growth and development would generate more jobs, better jobs, and decent work for all, and cut the unemployment rate in half [19]. Referring to the various descriptions, one hypothesis that needs to be considered is:

Hypothesis 3 (H3): regional economic development can affect poverty alleviation.

The relationship between economic growth and poverty shows inconclusive results [20]. This can happen because the relationship between these variables is indirect. Employment opportunities as a perfect mediating effect implies that economic growth will reduce poverty only if economic growth can create employment opportunities. This finding implies the importance of inclusive growth that provides the poor with

access to work and business opportunities. Chatani [21] concludes the relationship between economic growth, job creation, and poverty alleviation. Broadly, the fruits of economic growth are distributed through income opportunities and social policies that redistribute income, such as progressive taxes and social security, and which increase the economic opportunities of the poor through improved education and public health. Economic growth and poverty alleviation through employment, as work is often the only reliable means of income for most citizens and those in need. Something increasingly accepted that achieving high economic growth alone does not guarantee poverty alleviation.

An economic and labor market performance in Indonesia over the decades following the Asian financial crisis, corroborate this observation, and similar evidence abounds elsewhere in the world. The relationship between economic growth, job creation, and poverty alleviation in Indonesia to gain insight into strengthening these linkages [21]. The effect of economic growth on poverty reduction highly depends on the employment parameter that links the two. We can consider job creation as a function of economic growth, but the relationship is not linear, because many variables affect the capacity of the economy. The vital points based on the description above become the formulation for the following hypothesis:

Hypothesis 4 (H4): regional economic development can mediate the effect of regional economic independence on poverty alleviation.

Fiscal decentralization may indeed have a direct impact on economic growth, but the theoretical basis for this relationship remains underdeveloped. A fair summary of the empirical search for a direct relationship between fiscal decentralization and economic growth is that it remains an open question. We have devoted less attention in the literature to the indirect channels through which fiscal decentralization can affect economic growth [22]. The higher the fiscal decentralization, the higher the economic growth [23].

Furthermore, Daud and Soleman [24] actually view that

state revenues from reserves and the amount of crude oil produced have a negative and insignificant effect on economic growth. This proves the existence of Dutch disease.

Crude oil prices have a positive but not significant effect on economic growth [25]. The government diversifies its energy sources to ensure that economic activity is not unduly linked to the price of crude oil. The fifth assumption narrows down to the following hypothesis:

Hypothesis 5 (H5): decentralization can affect regional economic development.

The effect of fiscal decentralization on community welfare has a positive path coefficient with a significant probability level, where the higher the fiscal decentralization, the higher the community welfare [26]. Badrudin [27] asserts that fiscal decentralization, economic growth, and capital expenditures have a significant positive effect on community welfare. The same thing was conveyed by Pangaribuan [28], if fiscal decentralization together with other variables affect economic growth and community welfare. On the one hand, the partial estimation results show that fiscal decentralization has no effect on economic growth, but has a positive and significant effect on welfare.

It was also found that economic growth had a positive and significant effect on community welfare. Ologunde et al. [29] presented different findings, that empirical results reveal that there is no long-term relationship between government revenues from the crude oil sector on community welfare. We conclude the sixth hypothesis below.

Hypothesis 6 (H6): decentralization can affect the development of community welfare.

Economic growth affects the welfare of society has a positive coefficient with a significant level of probability. This shows that the higher the economic growth, the higher the level of welfare [21]. Rinaldi [30] illustrates that partial economic growth has a positive and significant effect on HDI. In the next hypothesis, we propose:

Hypothesis 7 (H7): regional economic development can affect community welfare.

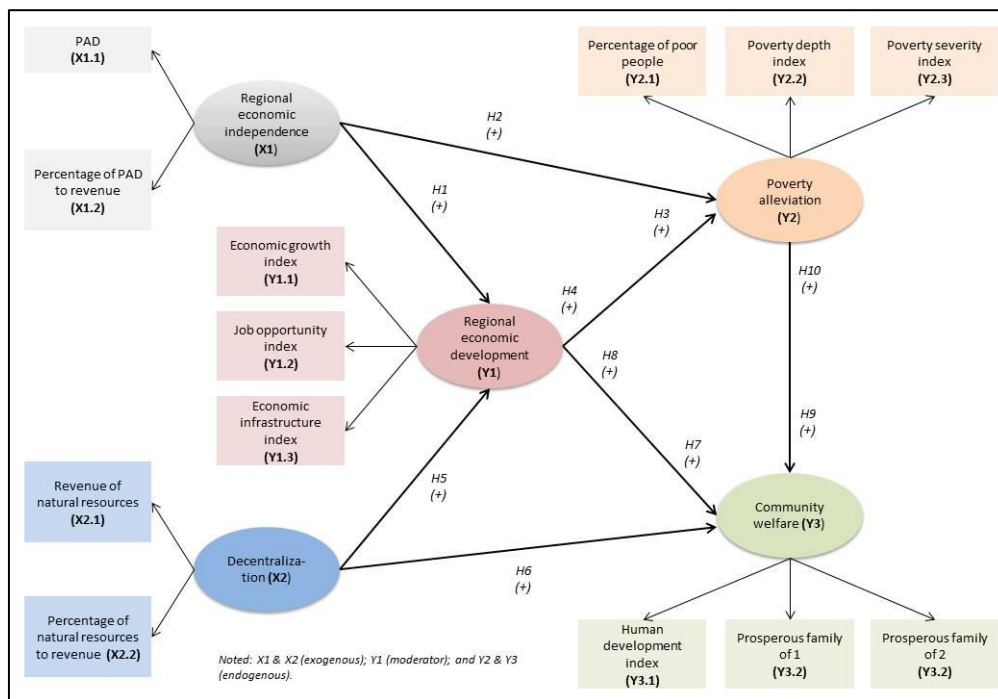


Figure 1. Conceptual framework and expected markers

Radosavljević [13] evaluates that directly the degree of fiscal decentralization has a positive effect on community welfare and its influence indirectly can be mediated by economic growth and has a positive effect on community welfare. Therefore, the eighth hypothesis designed as follows:

Hypothesis 8 (H8): regional economic development can mediate the effect of decentralization on community welfare.

Under its objectives, there are three major agendas whose impact on household welfare indicators will see, including health policies, consumption policies, and education policies. The test results show that the three programs targeting household poverty alleviation do not have the same effect on changes in household income. The BLT is the most effective compared to other programs. Therefore, it can be concluded if the three programs have different effects at different time periods, so it must apply them according to needs [9]. Based on this description, we concluded the ninth hypothesis:

Hypothesis 9 (H9): poverty alleviation can affect community welfare.

Growth has the potential to produce a virtuous circle of prosperity and opportunity. Strong growth and job opportunities increase the incentives for parents to invest in their children's education by sending them to school [31]. This leads to the emergence of a strong and growing group of entrepreneurs, which ideally generates pressure for improved governance. Strong economic growth therefore promotes human development [32]. We summarize the last hypothesis as below.

Hypothesis 10 (H10): poverty alleviation can mediate the effect of regional economic development on community welfare.

2.2 Concept flow

Referring to the previous empirical and theoretical reviews, we explored the overall conceptual framework of the research in Figure 1.

3. METHODOLOGY

3.1 Techniques and approaches

Quantitative research design relates to the design of a research project comprising numerical data and a certain measurement scale (unit of account). We provide the data in a numerical format and analyzed in a quantifiable manner using statistical methods [33]. Data was collected and got from government institution such as the Central Statistics Agency (BPS).

In data analysis, the orientation of the researchers used the WarpPLS software. The WarpPLS mechanism extends Partial Least Square (PLS). Characteristics of multivariate-based analysis involving variables more than or equal to three variables [34]. According to Azizah and Puspito [35], WarpPLS is highly proportional to the multivariate, so it channeled the orientation through Structural Equation Modeling (SEM). The hypotheses were tested by interpreting the findings of the analysis.

3.2 Demarcation

The objectivity of this study applies to nine regions (districts and cities), except for Mahakam Hulu Regency as part of the

East Kalimantan Province, Indonesia. Observation limits only reach time series data during the 2013-2018. Mahakam Ulu Regency is the area resulting from the latest division in East Kalimantan. We do not include the district as a population, because the data that is owned is not complete in series according to the year under review. The logical justification for the determination of the time lag is because the period after 2018 is COVID-19. We should note that the outbreak will certainly hinder the synchronization of empirical testing, where there is a serious economic disruption that will cause abnormal statistical data.

3.3 Variable classification

We classified rationalization of variables into three groups, namely exogenous variables, endogenous variables, and moderator variables [36, 37]. As for the operational definition based on the characteristics of each variable is formatted below.

In the macroeconomic framework, exogenous variables are dimensions whose values are determined outside the model and imposed on the model [38]. Two exogenous variables related to this study are regional economic independence and decentralization. Regional economic independence (X1) with two indicators including PAD (X1.1) and the percentage of PAD to local government fund receipts (X1.2). Decentralization (X2) is focused on non-tax revenue-sharing funds originating from revenue-sharing revenues from natural resources (X2.1) and the percentage of revenue-sharing revenues from natural resources to local government funds (X2.2). This construct was proposed to examine the phenomenon of the natural resource curse, also known as the abundance paradox and the poverty paradox. This model was formed because it considers that East Kalimantan Province has abundant reserves of resources such as coal and oil.

Second, endogenous variables are variables whose values are determined by the model. We consider endogenous changes responses to exogenous changes imposed on the model [39]. The term endogenetic in econometrics has related but different meanings. Endogenous random variables correlate with the error term, while exogenous variables do not [40, 41]. Community welfare, poverty alleviation, and regional economic development are combined as endogenous variables in this study. Community welfare (Y3) comprises three reflective indicators, namely HDI (Y3.1), prosperous family-1 (Y3.2), and prosperous family-2 (Y3.3). Then, there are also three reflective indicators of poverty alleviation (Y2), such as the percentage of poor people (Y2.1), the poverty depth index (Y2.2), and the poverty severity index (Y2.3). In addition, three reflective indicators that make up the regional economic development variable (Y1) should be considered. The three include the economic growth index (Y1.1), the employment opportunity index (Y1.2), and the economic infrastructure index (Y1.3).

Next, is the mediator variable. The function of these variables is to influence the strength or weakness of the relationship between exogenous variables and endogenous variables. Applicatively, regional economic development (Y1) and poverty alleviation (Y2) act as mediators.

3.4 Instrument

Data that has been collected, processed, and formed with SEM. This process includes confirmatory factor analysis,

confirmatory composite analysis, path analysis, calculation of PLS paths, and latent growth modeling. Structural equation models are often used to assess latent variables that cannot be observed [41]. We describe the function of the first equation in the outer model:

$$\xi_1 = \lambda_{\xi 1.1}(X1.1) + \delta_1 + \lambda_{\xi 1.2}(X1.2) + \delta_2 \quad (1)$$

$$\xi_2 = \lambda_{\xi 2.1}(X2.1) + \delta_3 + \lambda_{\xi 2.2}(X2.2) + \delta_4 \quad (2)$$

$$\eta_1 = \Lambda_{\eta 1.1}(Y1.1) + \varepsilon_1 + \lambda_{\eta 1.2}(Y1.2) + \varepsilon_2 + \lambda_{\eta 1.3}(Y1.3) + \varepsilon_3 \quad (3)$$

$$\eta_2 = \lambda_{\eta 2.1}(Y2.1) + \varepsilon_5 + \lambda_{\eta 2.2}(Y2.2) + \varepsilon_6 + \lambda_{\eta 2.3}(Y2.3) + \varepsilon_7 \quad (4)$$

$$\eta_3 = \lambda_{\eta 3.1}(Y3.1) + \varepsilon_8 + \lambda_{\eta 3.2}(Y3.2) + \varepsilon_9 + \lambda_{\eta 3.3}(Y3.3) + \varepsilon_{10} \quad (5)$$

Meanwhile, the econometric path in the inner model is formulated and adjusted as follows:

$$\eta_1 = \gamma_1(X1) + \gamma_5(X2) + \delta_5 \quad (6)$$

$$\eta_2 = \gamma_2(X1) + \delta_6 + \beta_1(Y1) + \delta_7 + \beta_2(Y1) + \delta_8 \quad (7)$$

$$\eta_3 = \gamma_6(X2) + \delta_9 + \beta_3(Y1) + \delta_8 + \beta_4(Y1) + \delta_9 + \beta_5(Y2) + \delta_{10} + \beta_6(Y2) + \delta_{10} \quad (8)$$

where: ξ = exogenous latent variable; η = endogenous latent variable; λ_{ξ} = loading factor variabel latent eksogen; λ_{η} = factor loading of endogenous latent variables; Λ_{ξ} = factor loading matrix of exogenous latent variables; Λ_{η} = factor loading matrix of endogenous latent variables; β = coefficient of effect of endogenous variables on endogenous variables; γ = coefficient of influence of exogenous variables on endogenous variables; ε = model error; δ = measurement error on manifest variable for exogenous latent variable; and ε = measurement error on manifest variable for endogenous latent variable.

4. FINDINGS

4.1 Model quality

The findings represent that the model suitability index has met the requirements (see Figure 2). Ten parameters have met the terms and conditions [42].

The mean path coefficient (APC) got a significant value (p

<0.001) with a coefficient of 0.374. The coefficient of determination (R2) is also significant (p <0.001) and the average F-squared (ARS) is 0.554. Interestingly, the adjusted R2 concluded a significant output (p <0.001), where the adjusted mean R-Squared (AARS) was at the 0.533 level. Then, the block variant inflation factor is 1.554 (ideal). Meanwhile, full collinearity (VIF) is 3.223, which means 'ideal'. Finally, Tenenhaus GoF shows 0.703, which means 'big'.

Regarding the Simpson's paradox ratio, we concluded the category was acceptable, or the value was 0.857. As the contribution ratio of R-Squared reaches 0.98, so the model is also workable. The statistical emphasis ratio is 1.000, where the model is feasible to continue and is like the nonlinear bivariate causality ratio up to 1.000 (accepted category).

The R2 values for the three endogenous latent variables each reached 0.584 (regional economic development and poverty alleviation), while 0.563 for community welfare. The ability of independent variables in explaining the variance of endogenous latent variables reached 58.4 percent. For regional economic development, it is 51.4 percent, 56.3 percent of poverty alleviation and community welfare.

The amount of R2 will always increase with each addition of exogenous variables from a model and this will cause bias. To deal with this problem, the Adjusted R2 value is applied.

We interpret complexity in Adjusted R2 on each endogenous latent variable, where 56.8 percent of regional economic development, 49.5 percent for poverty alleviation, and 53.7 percent is community welfare. We describe a summary of the results in Table 1.

Path coefficients					
	X1	X2	Y1	Y2	Y3
Y1	0.463	-0.491			
Y2	-0.308		-0.489		
Y3		0.069	0.628	-0.172	
P values					
	X1	X2	Y1	Y2	Y3
Y1	<0.001	<0.001			
Y2	0.007		<0.001		
Y3		0.302	<0.001	0.092	

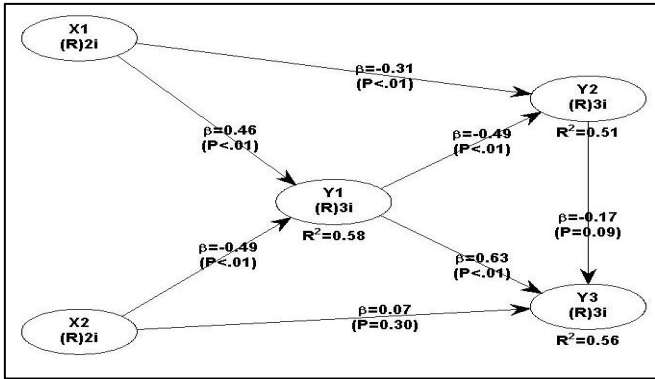
Source: calculations from WarpPLS.

Figure 2. Output on path coefficient

Table 1. Hypothesis testing output

Linkages	Coefficient (β)	Prob.	Remarks
X1 → Y1	0.463	<0.001	Significant and positive
X1 → Y2	-0.308	0.007	Significant and negative
Y1 → Y2	-0.489	<0.001	Significant and negative
X1 → Y1 → Y2	0.060	<0.001	Significant and positive
X2 → Y1	-0.491	<0.001	Significant and negative
X2 → Y3	0.069	0.302	Insignificant and positive
Y1 → Y3	0.628	<0.001	Significant and positive
X2 → Y1 → Y3	-0.062	<0.001	Significant and negative
Y2 → Y3	-0.172	0.092	Insignificant and negative
Y1 → Y2 → Y3	-0.670	<0.001	Significant and negative

Source: calculations from WarpPLS.



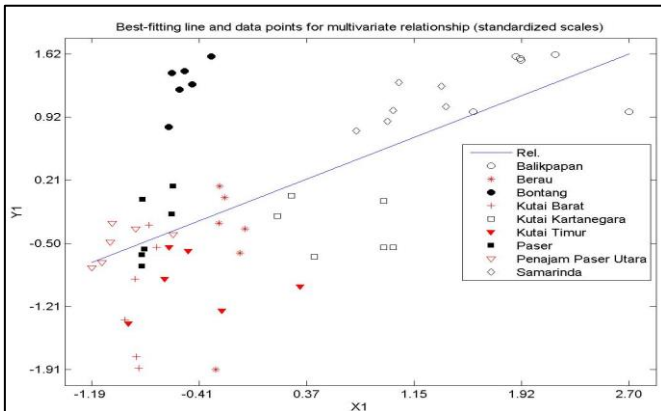
Source: calculations from WarpPLS.

Figure 3. Complete path diagram

Based on the findings, it represented all path coefficients in Figure 3. The path diagram implies the influence and level of significance of variables. If the p-value < 0.05 means that the exogenous variable has a significant impact on the endogenous variable and vice versa if the p-value > 0.05 , then the exogenous variable has an insignificant effect on the endogenous variable.

4.2 Partial path

The relationship between regional economic independence and regional economic development is positive (0.601) and significant ($p < 0.001$), where the coefficient of determination is 36 percent.



Source: calculations from WarpPLS.

Figure 4. Plot of the relationship between X1 and Y1

The greater the realization of PAD and the percentage of PAD to regional revenues, the greater the acquisition of the economic growth index, the employment opportunity index, and the economic infrastructure index (see Figure 4).

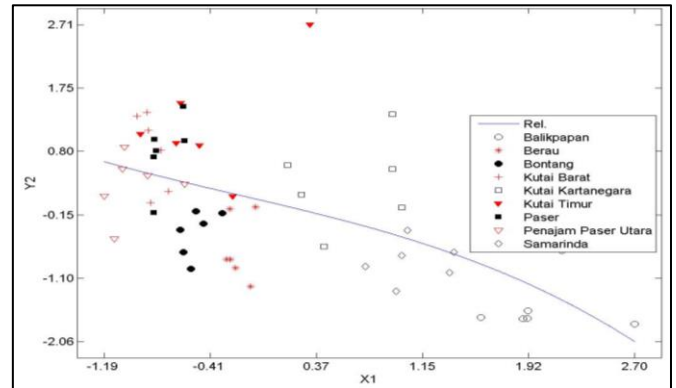
The greater the realization of PAD and the percentage of PAD to total regional revenue, the smaller the percentage of the poor. Figure 5 discusses the effect of regional economic independence on poverty alleviation (Y2) is negative and significant (-0.600 and $p < 0.001$) with an R2 value of 36 percent.

The effect of regional economic development on poverty alleviation is negative and significant, where the coefficient reaches -0.673 and the probability reaches $p < 0.001$, and R2 is 45 percent (see Figure 6).

Other results discuss the effect of decentralization on regional economic development. With a coefficient of -0.622

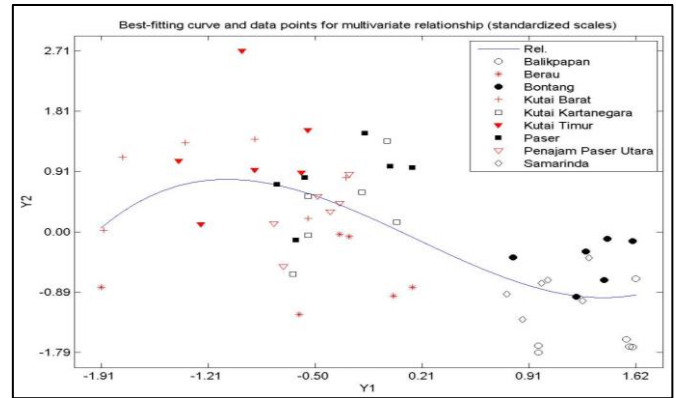
and $p < 0.001$, we concluded that the effect is negative, but significant. Figure 7 displays the interaction between decentralization and regional economic development.

Figure 8 evaluates the relationship between decentralization and community welfare with a result of -0.493, $p < 0.001$, and R2 reaching 24 percent, so it can be concluded that the relationship is negative and significant.



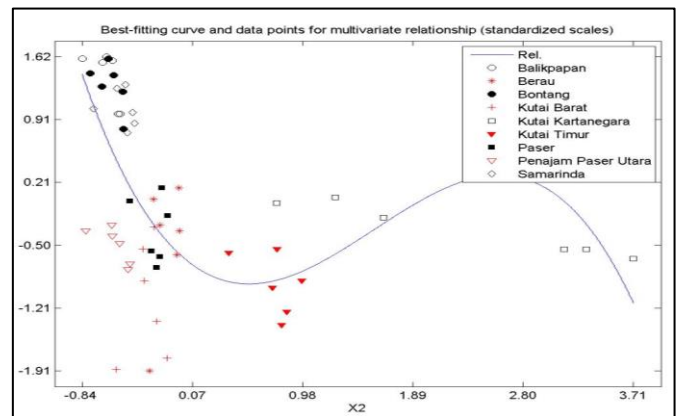
Source: calculations from WarpPLS.

Figure 5. Plot the relationship between X1 and Y2



Source: calculations from WarpPLS.

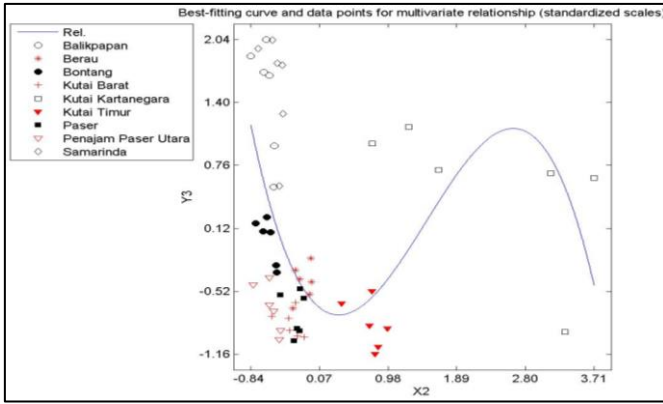
Figure 6. Plot the relationship between Y1 to Y2



Source: calculations from WarpPLS.

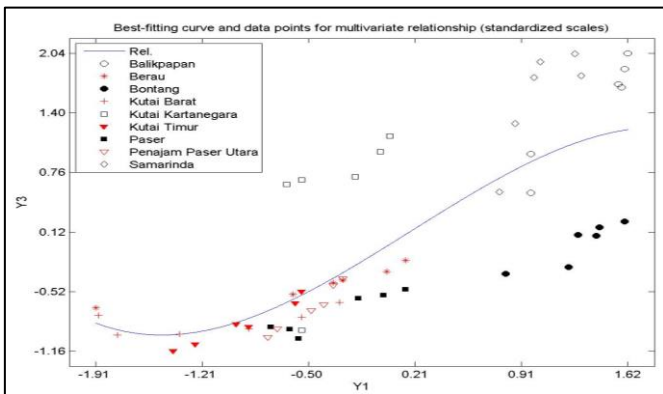
Figure 7. Plot of the relationship between X2 and Y1

It showed the interaction between regional economic development and community welfare in Figure 9. With a coefficient of 0.782, probability ($p < 0.001$), and a coefficient of R2 reaching 78.2 percent, regional economic development has a significant positive effect on community welfare.



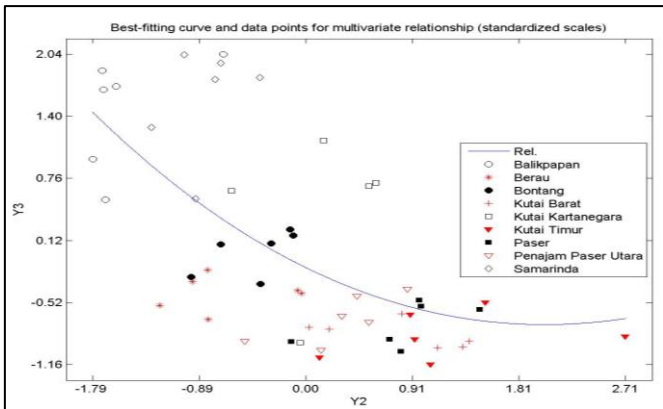
Source: calculations from WarpPLS.

Figure 8. Plot the relationship between X2 and Y3



Source: calculations from WarpPLS.

Figure 9. Plot the relationship between Y1 to Y3



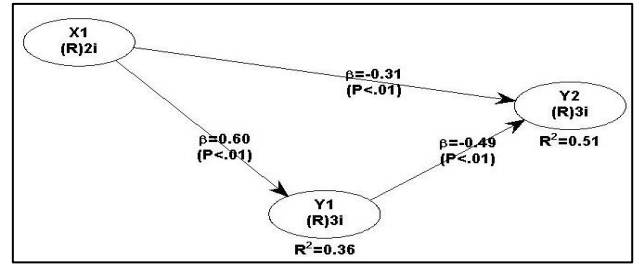
Source: calculations from WarpPLS.

Figure 10. Plot of the relationship between Y2 to Y3

Based on Figure 10, there is a negative but significant effect between poverty alleviation on community welfare. This is because there is a negative coefficient (-0.615), significance ($p < 0.001$), and R^2 reaches 38 percent.

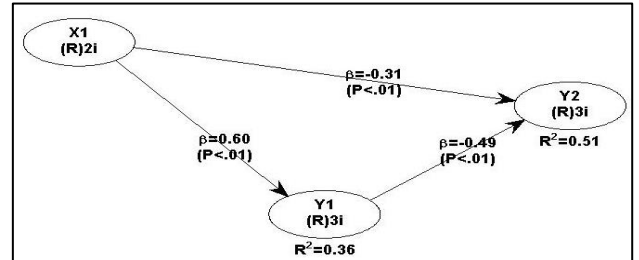
4.3 Mediation path

Figure 11 validates successful regional economic development, mediating in part on the relationship between regional economic independence and poverty alleviation. Regional economic independence and regional economic development represent poverty alleviation plays a role in mediating these two relationships by 51 percent.



Source: calculations from WarpPLS.

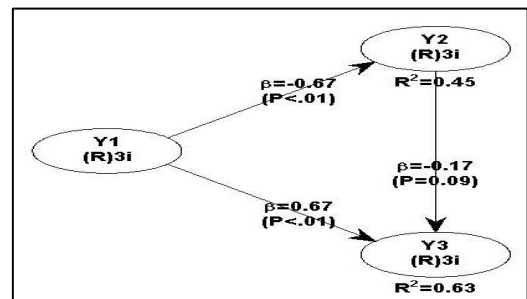
Figure 11. Path diagram between X1 to Y2 through Y1



Source: calculations from WarpPLS.

Figure 12. Path diagram between X2 to Y2 through Y1

Figure 12 describes the positive path coefficient between decentralized development and community welfare through regional economic development. As a result, regional economic development successfully mediates the relationship between these two variables. It also concluded regional development to be a variable with ‘complete mediation’ up to 55 percent.



Source: calculations from WarpPLS.

Figure 13. Path diagram between Y1 to Y3 through Y2

Poverty alleviation has also succeeded in mediating the relationship between regional economic development and community welfare with the status of ‘partial mediation’. The mediation determination reached 63 percent (see Figure 13).

5. DISCUSSION

The existence of abundant natural resources on the island of Kalimantan (such as the example of East Kalimantan) where mining has a large contribution to be managed in such a way, actually produces regional economic development results that are not as expected [43, 44]. Of course, this shows the need for supporting factors such as human resources and good infrastructure in order to manage natural resources more effectively and efficiently.

The East Kalimantan Province, which is known as the richest province in Indonesia, relies on its regional revenues,

especially from the mining sector, as can be seen from the revenue from decentralization as fiscal sharing of natural resources. The large contribution of mining to revenue generation in terms of growth must always be a concern because at a certain time mining can become a 'resource curse' for disturbances such as in economics and politics if a more in-depth study of the benefits and consequences of mining is not carried out [45].

Decentralization has a positive effect on community welfare, but it is not significant. In fact, not all elements of society feel the results of decentralization. Although decentralization may only focus on certain areas, the results of the decentralization [7] has not touched the community, especially in rural areas. The need for attention from the local government regarding the distribution of the results of decentralization that must be adjusted to the economic conditions of the people in East Kalimantan.

Poverty alleviation also has an insignificant and negative effect on community welfare. We can interpret this with government programs or policies that have been carried out in terms of poverty alleviation, which is showed by the reduction in the poverty rate that has not been optimal. There are still many people who have not reached the level of welfare [46, 47]. Those who live in slum squatter houses with school-age children who are forced to work to help ease the burden on their parents, so that the image of poverty still shackles society.

There is evidence that natural resources are a curse in the short term, however, the weak facts show their effect in the long term. Meanwhile, the resource curse that exists in Africa can be explained by the lack of good institutional structures in Africa. Therefore, the implication of the results is that good institutions promote economic growth, but bad institutions destroy the economy [48, 49].

Ideally, through implementing regional autonomy in East Kalimantan Province, local governments can collect financial resources and they manage them independently. This requires professional responsibility, so that they can channel the fiscal funds under the vision and mission regularly, oriented toward reducing poverty at the Regency and City levels. With an effective budget policy, they also expected it to increase the quality of life of the community.

6. CONCLUSIONS

The priority of this study is to investigate the relationship between regional economic independence, decentralization, and regional economic development on poverty alleviation and community welfare in East Kalimantan Province during 2013-2018. Referring to the empirical review, we got several vital implications, namely that regional economic development as a mediating variable has influenced decentralization on community welfare. Development has a huge role in increasing the impact of decentralization on community welfare. Of course, this becomes a reference in making policies related to the management of profit-sharing funds in creating regional economic development.

Other findings have led to several new paradigms, including the higher the decentralization received, the lower the regional economic development.

The weakness of the study is the availability of data, where there is one area in East Kalimantan Province (Mahakam Hulu Regency) that does not yet have a database according to research needs. We also realize that the 2019-2020 period

specifically is not highlighted because unexpected events such as the virus pandemic (COVID-19) are economic turmoil, so they are not relevant to the study phenomenon. We also realized another limitation in the consideration of other latent (endogenous) variables to be evaluated in the future agenda.

Another drawback is that it does not address the 'endogenous growth theory', which results from endogenous and not external forces [50]. This theory states that knowledge, investment in human capital, and innovation as significant contributors to economic growth. The theory also focuses on the positive externalities and spillover effects of a knowledge-based economy that will lead to economic development. As is well known, the long-term rate of economic growth depends on policy measures such as subsidies for research, creativity development, and education to increase the rate of growth. In the endogenous growth model, even incentives continue to be driven to strengthen innovation.

ACKNOWLEDGMENT

This work is an open examination requirement for Ph.D students in the Program of Doctoral Economics, Faculty of Economics and Business, Mulawarman University. We would like to thank Prof. Dr. Eny Rochaida, Prof. Dr. Zamruddin Hasid, and Dr. Rahmad Budi Suharto for his enlightenment. In addition, we appreciate the performance of anonymous reviewers at IJSDP who have provided professional recommendations for improving the manuscript.

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