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Regional Disparities and Determinants of Poverty in Papua: Klassen Typology Analysis and Panel Data Regression

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Abstract

This study was conducted to analyze economic development imbalances in various districts/cities in Papua and the determinants of poverty levels by applying Klassen's typology and panel data regression. The results of mapping using Klassen's typology indicate that most districts/cities in Papua are located in Quadrant IV (relatively underdeveloped areas) with lower average per capita income and economic growth compared to the provincial average. This situation is generally experienced by isolated mountainous and coastal areas that face problems in terms of infrastructure, accessibility, and dependence on traditional primary sectors. Meanwhile, panel data regression analysis using the Fixed Effect Model reveals that per capita income and income inequality (Gini Ratio) contribute positively and significantly to an increase in poverty rates. Conversely, the Human Development Index (HDI) has a negative and significant influence, indicating that improvements in the quality of education, health, and living standards can help reduce poverty rates. Meanwhile, economic growth and the open unemployment rate (Unemp) do not show a significant impact in explaining poverty variations. These findings indicate that Papua's development strategy needs to focus on strengthening the HDI and more equitable distribution of development outcomes so that economic growth can have a more inclusive impact

INTRODUCTION

Poverty is a complex issue and has always been an obstacle in the development process of a country. This situation not only reflects the economic limitations faced by the community but also indicates a failure in the distribution of development outcomes. Therefore, according to Mahendra (2016), one of the main objectives of development at the national level is to reduce poverty rates. These efforts are greatly influenced by various interrelated elements, such as income, unemployment rates, health, education, and access to resources Novriansyah (2018) Nationally, data from the Central Statistics Agency (BPS) shows a positive trend, marked by a decline in the percentage of poor people from 11.22% in 2015 to 9.36% in 2023.

However, this decline is not evenly distributed across all regions. Wasudewa et al.(2024) note that eastern Indonesia has experienced slower development due to limited regional fiscal capacity, low quality of human resources, and complex geographical challenges. This shows that development is more focused in the west, while the east, particularly Papua Province, still faces significant setbacks. Papua, as the center of inequality in Eastern Indonesia, actually shows a

worrying and contradictory trend. Between 2015 and 2023, although the percentage of poor people in Papua decreased from 28.17% to 26.03%, the absolute number of poor people actually increased from 859,150 to 915,150. This situation is contradictory because during the same period, Papua's Gross Regional Domestic Product (GRDP), both at current and constant prices, continued to show positive growth.

The paradox of uneven economic growth in Papua contradicts the findings of several previous studies. Pham & Riedel (2019) and Hassan et al.(2003) found that economic growth has a significant impact on reducing poverty rates, both in Vietnam and in other developing countries in Asia. This discrepancy indicates that the main source of poverty in Papua is not only overall economic growth, but rather the high level of inequality between districts/cities. In this case, some regions may experience rapid growth and become the "locomotive" of the economy, while other regions lag behind or even experience stagnation. The economic factors that cause poverty consist of three important elements, namely inequality in resource ownership, low quality of labor, and lack of access to capital.

These three things are interrelated and are closely related to the situation in Papua, which faces more complex challenges in terms of geography, economy, and structure compared to other regions in Indonesia. Inequality in natural resource ownership is approached using the variable of economic growth. Furthermore, the element of low labor quality is represented by the Human Development Index (HDI) and the Open Unemployment Rate (OUR). Meanwhile, lack of access to capital is not directly included in the model but is approached using the variables of per capita income and the Gini ratio. Based on this context, this study aims not only to explore the impact of macro factors on poverty, but also to focus on regional differences as the main focus of analysis. The study, entitled "Regional Differences and Poverty Factors in Papua: Classification Type Analysis and Panel Data Regression," is expected to provide deeper insights by considering spatial aspects.

Therefore, the results of this study will not only identify the elements that influence poverty, but will also explain the regions where these elements play the most significant role. The results of these findings are expected to produce more appropriate and relevant policy recommendations, especially in addressing the root causes of inequality, which is at the heart of the poverty problem in Papua.

METHODS

2.1 Research Design and Data

This study employs a quantitative research approach using secondary data in the form of balanced panel data, combining cross-sectional data (29 districts/cities in Papua) and time-series data over the period 2017–2024. The data were obtained from official publications of the Statistics Indonesia (BPS) of Papua Province. The dependent variable in this study is the poverty rate, while the independent variables include economic growth, per capita income (logarithmic form), income inequality (Gini ratio), Human Development Index (HDI), and open unemployment rate.

2.2 Analytical Framework

The analysis consists of two main stages: (1) regional classification using Klassen typology and (2) inferential analysis using panel data regression.

2.3 Klassen Typology Analysis

Klassen typology is used to classify regions based on their relative economic performance by comparing district/city economic growth and per capita income with provincial averages. This approach divides regions into four quadrants:

1. Quadrant I (Advanced and Fast-Growing Regions): high growth and high income
2. Quadrant II (Advanced but Depressed Regions): low growth but high income
3. Quadrant III (Fast-Growing Regions): high growth but low income
4. Quadrant IV (Relatively Underdeveloped Regions): low growth and low income

TABLE 1. Klassen's Quadrant Typology

Economic Growth (r)	GRDP per capita (y)	
	yi < y	yi > y
ri > r	Quadrant III Fast-Growing Region	Quadrant I Advanced & Fast-Growing Region
ri < r	Quadrant IV Relatively Underdeveloped Regions	Quadrant II Advanced but Under Pressure Regions
Explanation: ri : economic growth of district/city i r : average economic growth yi : GRDP per capita of district/city i y : average GRDP per capita		

This classification provides a spatial overview of regional disparities and identifies priority areas for development intervention.

2.4 Panel Data Regression Model

To examine the determinants of poverty, this study applies panel data regression. The general model is specified as:

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \cdots + \beta_k X_{kit} + u_{it}$$

Where:

1. Y_{it}represents the poverty rate in region $i$at time t;
2. X_{kit}denotes the independent variables;
3. $alpha$is the intercept;
4. $beta_k$are the estimated coefficients;
   and
5. $u_{it}$is the error term.

2.5 Model Estimation Technique

Three alternative panel data estimation models are considered:

1. Pooled Least Squares (PLS),
2. Fixed Effects Model (FEM), and
3. Random Effects Model (REM).

The selection of the most appropriate model is conducted through:

1. Chow Test (PLS vs FEM),

2. Lagrange Multiplier (LM) Test (PLS vs REM), and
3. Hausman Test (FEM vs REM).

The Fixed Effect Model (FEM) is selected as the preferred model based on statistical test results.

2.6 Diagnostic Testing

To ensure robustness and reliability, classical assumption tests are conducted, including multicollinearity, heteroskedasticity, and autocorrelation tests. In the presence of heteroskedasticity or autocorrelation, robust standard errors are applied to obtain consistent estimators that satisfy the Best Linear Unbiased Estimator (BLUE) criteria.

RESULTS AND DISCUSSION

3.1 Results

This section presents the empirical findings of the study, including regional disparity mapping using Klassen typology, descriptive statistics of the variables, and the estimation results of panel data regression.

3.1.1 Regional Disparities Based on Klassen Typology

The mapping of regional disparities using Klassen typology provides a comprehensive spatial overview of economic development in Papua. The classification is based on the comparison between district/city economic growth and per capita income relative to provincial averages. The results reveal that the majority of districts/cities in Papua fall into Quadrant IV (Relatively Underdeveloped Regions). These include Puncak, Yapen Islands, Biak Numfor, Tolikara, Dogiyai, Deiyai, Paniai, Yahukimo, Puncak Jaya, and Intan Jaya. These regions are characterized by low economic growth and low per capita income compared to the provincial average.

This finding indicates that structural constraints remain dominant in these regions. Limited infrastructure, poor accessibility, and reliance on traditional economic sectors significantly hinder economic development. In particular, mountainous and remote coastal areas face severe logistical challenges, restricting the flow of goods and services. As a result, economic activities remain localized and less productive. Conversely, Quadrant I (Advanced and Fast-Growing Regions) includes Mimika, Merauke, Jayapura, Nabire, Sarmi, Mamberamo Raya, and Jayapura City. These regions demonstrate strong economic performance, with both growth and income levels above the provincial average. These areas function as growth centers and are supported by high-value-added sectors such as mining, agriculture, and services. However, the concentration of economic activities in these regions has not significantly reduced disparities. Instead, it has contributed to spatial inequality, where growth is concentrated in certain regions while others remain left behind.

Furthermore, Quadrant II (Advanced but Under Pressure Regions), including Boven Digoel, Waropen, Keerom, and Supiori, reflects regions with relatively high income but declining or slow economic growth. This suggests the presence of structural inefficiencies or economic stagnation. Meanwhile, Quadrant III (Fast-Growing Regions), consisting of Asmat, Yalimo, Lanny Jaya, Nduga, Central Mamberamo, Mappi, Jayawijaya, and Pegunungan Bintang, indicates regions with high growth but low income levels. This implies that economic expansion has not yet translated into improved welfare. Overall, the Klassen typology results confirm the presence of significant regional disparities in Papua, both in terms of economic performance and welfare indicators.

3.1.2 Descriptive Statistics

Descriptive statistics are used to provide an overview of the characteristics and distribution of the research variables.

Table 1. Descriptive Statistics of Variables

Variable	Mean	Std. Dev.	Minimum	Maximum
Poverty (%)	28.47	9.58	10.01	43.65
Economic Growth (%)	3.45	4.41	-38.52	36.85
Log Per Capita Income	2.98	0.95	1.46	5.84
Gini Ratio	0.34	0.06	0.15	0.46
HDI	57.97	11.18	27.87	81.98
Unemployment Rate (%)	3.17	2.91	0.07	13.39

Source: Processed research data (2025)

The average poverty rate in Papua is relatively high at 28.47%, with a wide range between regions. The standard deviation of 9.58 indicates substantial variation, suggesting unequal distribution of welfare. Economic growth shows high volatility, with values ranging from -38.52% to 36.85%. This indicates unstable economic performance across regions, reflecting vulnerability to external shocks and structural limitations. Per capita income (in logarithmic form) has a mean of 2.98, indicating disparities in income distribution. The Gini ratio further supports this, with values indicating moderate but uneven inequality across regions. The Human Development Index (HDI) shows a wide range, from 27.87 to 81.98, highlighting disparities in human development achievements. Similarly, the unemployment rate varies significantly, reflecting heterogeneous labor market conditions. These descriptive findings confirm that disparities in Papua are multidimensional, encompassing economic, social, and labor market aspects.

3.1.3 Panel Data Regression Results

The determinants of poverty are analyzed using panel data regression with the Fixed Effect Model (FEM).

Table 2. Panel Data Regression Results (FEM)

Variable	Coefficient	t-Statistic	Prob
Economic Growth	0.007	0.61	0.545
Log Per Capita Income	1.582	2.50	0.019**
Gini Ratio	2.788	2.28	0.031**
HDI	-0.287	-4.25	0.000***
Unemployment Rate	-0.022	-0.44	0.662
Constant	28.52	165.10	0.000

R-squared (within): 0.39
Prob > chi^2: 0.0008
Source: Processed research data (2025)

The estimation results indicate that economic growth does not have a significant effect on poverty. Meanwhile, per capita income and income inequality (Gini ratio) have a positive and

significant effect, while HDI has a negative and significant effect. The unemployment rate does not show a significant relationship.

3.2 Discussion

3.2.1 Regional Disparities and Spatial Inequality

The findings from the Klassen typology analysis reveal a significant spatial imbalance in economic development across Papua. The dominance of districts/cities classified in Quadrant IV indicates that most regions experience both low economic growth and low per capita income. This condition reflects structural constraints, including geographical isolation, limited infrastructure, and restricted access to markets and public services. From a spatial perspective, development in Papua is highly uneven. Regions located in mountainous and remote coastal areas tend to be disconnected from major economic centers. This geographical fragmentation limits economic interaction between regions, thereby weakening the potential for growth spillover effects. In theory, growth centers are expected to stimulate surrounding regions through investment and trade linkages. However, the findings suggest that such spillover mechanisms are not functioning effectively in Papua. This condition highlights the need for spatially integrated development strategies. Without improving connectivity and reducing regional isolation, disparities between developed and underdeveloped regions are likely to persist or even widen.

3.2.2 Economic Growth and the Failure of the Trickle-Down Effect

One of the key findings of this study is that economic growth does not have a significant effect on poverty reduction. This result challenges the traditional "trickle-down effect" theory, which assumes that economic growth will automatically benefit lower-income groups. In the context of Papua, economic growth appears to be concentrated in specific sectors, particularly capital-intensive industries such as mining and large-scale agriculture. While these sectors contribute significantly to regional output, they generate limited employment opportunities and have weak linkages with the local economy. As a result, the benefits of growth are not widely distributed across the population. This finding suggests that economic growth in Papua is not inclusive. Instead of reducing poverty, growth tends to reinforce existing inequalities. Therefore, relying solely on economic growth as a strategy for poverty reduction is insufficient. A more inclusive approach is needed to ensure that the benefits of growth are shared more equitably.

3.2.3 Income Inequality as a Driver of Poverty

The regression results show that both per capita income and the Gini ratio have a positive and significant effect on poverty. This indicates that income inequality plays a central role in shaping poverty dynamics in Papua. The positive relationship between per capita income and poverty reflects a paradox of development. While average income levels increase, the benefits are disproportionately captured by higher-income groups. Consequently, income growth does not translate into improved welfare for the majority of the population. This finding is reinforced by the significant effect of the Gini ratio, which indicates that higher inequality leads to higher poverty levels. In highly unequal societies, access to economic opportunities is limited for lower-income groups, making it difficult for them to escape poverty. From a policy perspective, this highlights the importance of redistributive mechanisms. Without effective income redistribution, economic growth may exacerbate inequality and worsen poverty conditions. Policies such as progressive taxation, targeted subsidies, and equitable fiscal transfers are essential to address this issue.

3.2.4 The Role of Human Development in Poverty Reduction

The Human Development Index (HDI) is found to have a negative and significant effect on poverty, indicating that improvements in human capital play a crucial role in reducing poverty levels. This finding is consistent with human development theory, which emphasizes the importance of education, health, and living standards in improving individual well-being. Higher HDI levels are associated with increased productivity, better employment opportunities, and higher income potential. In the context of Papua, improving access to education and healthcare is particularly important, given the significant disparities between regions. However, the distribution of HDI is uneven across Papua. Remote and underdeveloped regions tend to have lower HDI levels, reflecting limited access to basic services. This suggests that improving average HDI alone is not sufficient; policies must also address regional disparities in human development. Investments in education and healthcare infrastructure, particularly in remote areas, are essential for achieving sustainable poverty reduction. In addition, improving the quality of these services is equally important to ensure long-term impact.

3.2.5 Labor Market Structure and Informality

The results show that the unemployment rate does not have a significant effect on poverty. This finding suggests that labor market dynamics in Papua differ from conventional economic assumptions. In many regions, unemployment is a key determinant of poverty. However, in Papua, the dominance of the informal sector allows individuals to remain economically active even without formal employment. While this reduces open unemployment, it does not necessarily improve welfare, as informal jobs are often characterized by low productivity and unstable income. This condition implies that employment status alone is not a sufficient indicator of economic well-being. Many individuals may be employed but still live in poverty due to low wages and limited job security. Therefore, policy interventions should focus on improving job quality rather than merely reducing unemployment rates. This includes promoting skills development, supporting small businesses, and facilitating the transition from informal to formal employment.

3.2.6 Toward Inclusive and Equitable Development

Overall, the findings of this study highlight that poverty in Papua is a multidimensional issue driven by spatial disparities, income inequality, and limited human development. Economic growth alone is not sufficient to address these challenges. An inclusive development approach is required, focusing on equitable distribution of economic benefits, improved access to basic services, and enhanced human capital. In addition, spatially targeted policies are necessary to address the specific needs of different regions. Regions in Quadrant IV require priority attention through infrastructure development and basic service provision. Meanwhile, growth centers in Quadrant I should be encouraged to generate spillover effects to surrounding regions. In conclusion, achieving sustainable poverty reduction in Papua requires a comprehensive strategy that integrates economic, social, and spatial dimensions of development.

CONCLUSION

4.1 Summary of Findings

This study aims to analyze regional disparities and the determinants of poverty in Papua by integrating Klassen's typology and panel data regression approaches. The results reveal that

regional inequality remains a dominant feature of Papua's development landscape. Based on Klassen's typology, most districts/cities are categorized into Quadrant IV (relatively underdeveloped regions), indicating low economic growth and low per capita income compared to the provincial average. These regions are generally located in geographically isolated areas, where limited infrastructure, poor accessibility, and dependence on traditional economic sectors hinder development progress. In contrast, several regions classified in Quadrant I (advanced and fast-growing regions), such as Mimika, Merauke, and Jayapura, act as growth centers supported by high-value economic sectors. However, the existence of these growth poles has not been able to reduce regional disparities significantly. Furthermore, Quadrant III regions show high economic growth but low income levels, reflecting a transitional stage of development, while Quadrant II regions indicate economic stagnation despite relatively high income levels. From the econometric analysis, the panel data regression results show that per capita income and income inequality (Gini ratio) have a positive and significant effect on poverty, indicating a development paradox where economic gains are not evenly distributed. Conversely, the Human Development Index (HDI) has a negative and significant effect, confirming its crucial role in poverty reduction. Meanwhile, economic growth and the open unemployment rate do not show a significant impact on poverty, suggesting that growth in Papua is not yet inclusive and that labor market indicators do not fully capture economic vulnerability.

4.2 Theoretical Implications

The findings of this study contribute to the broader literature on development economics by challenging the conventional assumption that economic growth automatically reduces poverty. The insignificance of economic growth in explaining poverty levels highlights the limitations of the trickle-down effect theory, particularly in regions characterized by structural inequality and uneven resource distribution. This study also reinforces the importance of inequality as a key determinant of poverty. The positive relationship between per capita income and poverty suggests that aggregate economic indicators may obscure distributional issues. In this context, the Gini ratio becomes a crucial explanatory variable, emphasizing that equitable distribution is as important as economic expansion. Moreover, the strong and significant role of HDI supports human development theory, which posits that improving education, health, and living standards is fundamental to reducing poverty. This finding confirms that poverty is a multidimensional issue that cannot be addressed solely through economic growth, but requires a holistic approach that integrates social development dimensions.

4.3 Policy Implications

The results of this study imply that poverty reduction strategies in Papua must adopt a spatially differentiated and inclusive approach. For regions in Quadrant IV, policy priorities should focus on accelerating infrastructure development, improving connectivity, and expanding access to basic services such as education and healthcare. These efforts are essential to reduce structural barriers and stimulate local economic activities. In Quadrant III regions, which exhibit high growth but low income levels, policies should aim to transform economic growth into inclusive welfare improvements. This can be achieved through strengthening local value chains, promoting small and medium enterprises (SMEs), and increasing community participation in economic activities. For Quadrant I regions, the main challenge lies in ensuring that the benefits of economic growth are distributed more equitably. Therefore, redistributive policies, such as optimizing fiscal transfer

mechanisms and improving the management of special autonomy funds, are necessary to reduce interregional inequality. Additionally, strengthening human capital development should be a central policy focus. Investments in education, healthcare, and skills development are proven to have a significant impact on poverty reduction. Special attention must be given to remote areas to ensure equitable access to quality public services.

4.4 Limitations and Future Research

Despite providing important insights, this study has several limitations. First, the analysis relies on macro-level panel data, which may not fully capture micro-level variations in poverty and inequality. Second, the study does not explicitly incorporate institutional and governance variables, which may also influence development outcomes in Papua. Future research is recommended to explore these aspects by integrating micro-level household data, qualitative approaches, or spatial econometric models. In addition, further studies could examine the role of institutional quality, fiscal decentralization, and social capital in shaping regional development and poverty dynamics.

4.5 Final Remark

In conclusion, poverty in Papua is fundamentally driven by regional inequality and uneven development rather than merely low economic growth. Without inclusive policies that emphasize equitable distribution and human development, economic progress will continue to benefit only a limited segment of the population. Therefore, a shift toward equity-oriented and spatially targeted development strategies is essential to achieve sustainable and inclusive poverty reduction in Papua.

REFERENCE

Akman Baizatul, & Sapha Diana. (2018). Pengaruh Korupsi Terhadap Pertumbuhan Ekonomi Indonesia. Jurnal Ilmiah Mahasiswa (JIM), 3(4), 1–10. https://doi.org/10.54957/jurnalku.v4i1.677

Alfada, A. (2019). The destructive effect of corruption on economic growth in Indonesia : A threshold model. Heliyon, 5(April).

Ayana, I. D., Demissie, W. M., & Sore, A. G. (2024). On the government revenue on economic growth of Sub-Saharan Africa: Does institutional quality matter? Heliyon, 10(2). https://doi.org/10.1016/j.heliyon.2024.e24319

Damanik, D., & Marta Saragih. (2023). Pandangan Korupsi, Inflasi dan Pertumbuhan Ekonomi di ASEAN. EKUILNOMI: Jurnal Ekonomi Pembangunan, 5(1).

Fajar, M., & Azhar, Z. (2019). Indeks Persepsi Korupsi Dan Pembangunan Manusia Terhadap Pertumbuhan Ekonomi Di Negara-Negara Asia Tenggara. Jurnal Ecogen, 1(3), 681. https://doi.org/10.24036/jmpe.v1i3.5114

Fera Kristina, FriskillaAngeliani, Nurhayati, Hidayati, N. F., Malaifani, S. R. O., & Arief Sadjiarto, L. R. (2022). View of Pengaruh Pengangguran Dan Indeks Pembangunan Manusia Terhadap Pertumbuhan Ekonomi Di Provinsi Bali. Jurnal Pembangunan Masyarakat, 7(2), 299–314.

Gründler, K., & Potrafke, N. (2019). Economy Corruption and economic growth : New empirical evidence. European Journal of Political Economy, 60(August), 1–14.

Hazmi, R. A. Al. (2024). Pengaruh Kemiskinan Dan Korupsi Terhadap Pertumbuhan Ekonomi Indonesia. Jurnalku, 4(1), 1–10.

Lutfi, A. F., Diartho, H. C., Ilmu, J., Pembangunan, S., Ekonomi, F., Unej, U. J., & Kalimantan, J. (2020). Dampak Korupsi Terhadap Pertumbuhan Ekonomi : Studi Kasus 4 Negara di ASEAN. e-Journal Ekonomi Bisnis dan Akuntansi, VII(1995), 30–35.

Mukaromah, L., Zakia Hanifatuzzahra, AdeNasrullah, Latifah, T. M., Purwaningsih, V. T., & Suparta, I. W. (2022). Pengaruh Indeks Pembangunan Manusia, Tingkat Upah Minimum, Dan Tingkat Pengangguran Terhadap Pertumbuhan Ekonomi Indonesia Tahun 2022. Jurnal Ilmiah Fakultas Ekonomi Universitas Flores, 13(2), 228–245.

Ofori, P. E., Kuuwill, A., & Quaye, B. (2024). Effect of human capital development and institutional quality on inclusive growth in African countries. Cogent Economics & Finance, 12(1). https://doi.org/10.1080/23322039.2024.2357155

Sri Nawatmi. (2016). Pengaruh Korupsi Terhadap Pertumbuhan Ekonomi Studi Empiris Negara-Negara Asia Pasifik. Media Ekonomi dan Manajemen, 31(1), 14–25.

Sujidno, R., & Febriani, R. E. (2023). Pengaruh Korupsi, Pengeluaran Pemerintah dan Jumlah Uang Beredar (M2) Terhadap Pertumbuhan Ekonomi di ASEAN. Jurnal Sosial Ekonomi Dan Humaniora, 9(2), 205–220. https://doi.org/10.29303/jseh.v9i2.202

Tohari, M. (2022). Dampak Korupsi Terhadap Pembangunan Ekonomi Dan Pembangunan Politik. JPeHI (Jurnal Penelitian Hukum Indonesia), 3(1), 40. https://doi.org/10.61689/jpehi.v3i02.381

Triatmanto, B., & Bawono, S. (2023). The interplay of corruption, human capital, and unemployment in Indonesia: Implications for economic development. Journal of Economic Criminology, 2(September).

Uroos, A., Shahzad, M., Umar, M., & Yahya, G. (2022). Economic analysis of corruption : evidence from Pakistan. TRANSNATIONAL CORPORATIONS REVIEW, 14(1), 46–61.

Winarti, V. P., Fyesya Erliantari, & Desmawan, D. (2022). Pengaruh Indeks Pembangunan Manusia Terhadap Pertumbuhan Ekonomi Provinsi Banten 2017 – 2021. Jurnal Ekuilnomi, 4(2), 155–163. https://doi.org/10.36985/ekuilnomi.v4i2.454