

Does Fiscal Decentralization Improve Social Welfare? Evidence From Indonesian Provinces

Fitri S. Kasim^{1*}, Busman¹, Zulfikar Jakaputera Djalang¹

Afiliation ¹Universitas Alkhairaat

Email fitris.kasim@gmail.com *

DOI <https://doi.org/10.23969/jrie.v6i1.425>

Citation Kasim, F. S., Busman, B., & Djalang, Z. J. . (2026). Does Fiscal Decentralization Improve Social Welfare? Evidence From Indonesian Provinces. *Jurnal Riset Ilmu Ekonomi*, 6(1), 43–62. <https://doi.org/10.23969/jrie.v6i1.425>



Copyright (c) 2026 Jurnal Riset Ilmu Ekonomi

Creative Commons License

This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.

ABSTRACT

This study examines the relationship between fiscal decentralization and community welfare in Indonesia by testing the mediating role of economic growth. Using panel data from 34 provinces during 2020–2024, the study applies a formative Structural Equation Modeling–Partial Least Squares (SEM-PLS) approach to evaluate both direct and indirect structural relationships. Fiscal decentralization is represented by local own-source revenue, capital expenditure, and intergovernmental transfers, while welfare is measured through poverty, real per capita expenditure, life expectancy, and income inequality indicators. The findings reveal that fiscal decentralization has a significant positive direct effect on community welfare, indicating that regional fiscal capacity contributes substantially to improving social outcomes across provinces. However, economic growth does not function as a significant mediating variable, as the indirect effect is statistically insignificant and the predictive relevance of the growth construct remains weak. These results suggest that the effectiveness of fiscal decentralization in Indonesia is driven more by the quality and orientation of public expenditure toward social sectors than by aggregate economic expansion. The study contributes to the fiscal decentralization literature by emphasizing the importance of outcome-based welfare approaches in evaluating regional fiscal performance. Policy implications highlight the need to strengthen welfare-oriented fiscal allocation frameworks to support more inclusive and equitable regional development in Indonesia.

Keywords: Economic Growth, Fiscal Decentralization, SEM-PLS, Social Outcomes, Social Welfare

JEL Classification: O47, I31, D63

INTRODUCTION

Economic growth has traditionally been positioned as the primary indicator of development success in both developed and developing countries. In many national development frameworks, including Indonesia, increases in Gross Regional Domestic Product (GRDP) are frequently interpreted as evidence of improved welfare and socioeconomic progress. This growth-oriented paradigm has strongly influenced fiscal policy evaluation, where regional performance is commonly assessed through macroeconomic expansion rather than multidimensional welfare outcomes. However, contemporary development debates increasingly question the assumption that economic growth automatically translates into broader social welfare improvements, particularly in highly unequal and spatially fragmented economies (Jean-Paul & Martine, 2018).

In the Indonesian context, the divergence between economic growth and welfare outcomes remains substantial across provinces. Data from the Central Statistics Agency indicate that several provinces experiencing high GRDP growth continue to face persistent poverty, inequality, and low human development performance. West Papua, for instance, recorded the highest economic growth rate nationally in 2022 (15.58%), yet simultaneously experienced a poverty rate above 21% and one of the lowest Human Development Index (HDI) scores in Indonesia. Similar patterns can also be observed in East Kalimantan and East Nusa Tenggara, where positive economic growth was accompanied by increasing income inequality and relatively high poverty incidence. These disparities suggest that economic expansion alone is insufficient to ensure inclusive welfare distribution and improved quality of life. In many regions, growth tends to be concentrated in extractive industries, capital-intensive sectors, or enclave-based economic activities that generate limited spillover effects for local communities (Kanbur et al., 2018; UNDP, 2022).

This issue becomes increasingly important within the framework of fiscal decentralization. Since the implementation of regional autonomy reforms, Indonesia has transferred substantial fiscal authority to local governments through mechanisms such as local own-source revenue, intergovernmental transfers, and regional expenditure authority. Classical fiscal federalism theory argues that decentralization improves allocative efficiency because local governments possess better information regarding community preferences and regional needs, thereby stimulating economic growth and ultimately improving welfare (Weingast, 2014). Under this perspective, economic growth functions as the principal transmission mechanism linking fiscal decentralization to welfare improvement.

Nevertheless, empirical findings regarding this relationship remain highly inconclusive. Several studies demonstrate that fiscal decentralization positively contributes to regional economic growth through increased public investment efficiency, local infrastructure expansion, and improved public service delivery (Canavire-Bacarreza et al., 2020; Jin & Rider, 2022). Conversely, other studies argue that decentralization may generate fiscal inefficiency, soft-budget dependency, regional inequality, and ineffective expenditure allocation, particularly in developing economies with uneven institutional capacity (Asatryan et al., 2017; Eyraud & Lusinyan, 2013). In the Indonesian case, evidence is similarly fragmented. While some studies report positive effects of regional fiscal capacity on economic performance, others find that increases in local revenue and capital expenditure do not necessarily lead to inclusive growth or welfare enhancement (Ginting, 2022; Khoirunisa & Sulaeman, 2022).

More importantly, an emerging body of literature suggests that economic growth may not function effectively as a mediating mechanism between fiscal decentralization and social welfare. Several provincial-level studies in Indonesia indicate that improvements in fiscal capacity can directly influence welfare indicators without necessarily passing through economic growth channels (Aisyah, 2025; Pambudy & Syairozi, 2019). This phenomenon implies that regional fiscal policy may operate more strongly through redistributive and social intervention mechanisms rather than through aggregate economic expansion. In other words, the effectiveness of decentralization may depend less on how rapidly the regional economy grows and more on how public resources are allocated toward education, healthcare, social protection, and poverty alleviation programs.

The inconsistency of previous findings reveals an important theoretical and empirical gap. Existing fiscal decentralization literature predominantly emphasizes economic growth as the central outcome and mediation pathway, while relatively limited attention has been given to direct welfare transmission mechanisms, particularly in developing and regionally heterogeneous countries such as Indonesia. Furthermore, many previous studies rely on conventional regression approaches that treat fiscal decentralization and welfare variables as reflective or single-dimensional constructs, despite their multidimensional and formative nature. Fiscal decentralization consists of complementary fiscal instruments that jointly shape regional fiscal capacity, while welfare itself encompasses multiple social dimensions including inequality, poverty, expenditure capability, and life expectancy. Ignoring this complexity may produce oversimplified conclusions regarding the effectiveness of decentralization policies.

From a policy perspective, this issue is equally critical. When regional fiscal performance continues to be evaluated primarily through economic growth indicators, governments may prioritize short-term macroeconomic expansion over long-term social welfare outcomes. Such orientation potentially encourages fiscal policies that favor growth-generating sectors without ensuring equitable benefit distribution across communities. Consequently, regional inequality, poverty persistence, and unequal access to public services may continue despite high economic growth achievements.

This raises an important policy question regarding whether fiscal decentralization should be evaluated based on economic productivity alone or on its capacity to generate inclusive social outcomes.

Based on these considerations, this study develops an analytical framework that simultaneously examines the direct and indirect relationships between fiscal decentralization and social welfare in Indonesia. Specifically, this study investigates whether economic growth genuinely functions as an effective mediating mechanism or whether fiscal decentralization exerts a more substantial direct effect on welfare outcomes. Using provincial panel data from 34 provinces during the 2020–2024 period and applying a formative Structural Equation Modeling–Partial Least Squares (SEM-PLS) approach, this study contributes to the literature in three important ways.

First, this study shifts the analytical focus of fiscal decentralization from growth-oriented evaluation toward welfare-oriented outcomes. Second, it reconceptualizes economic growth not as an automatic transmission mechanism, but as an empirical pathway whose effectiveness must be critically tested. Third, methodologically, this study applies formative SEM-PLS modeling to capture the multidimensional and non-reflective characteristics of fiscal decentralization and social welfare constructs, thereby providing a more comprehensive understanding of fiscal policy effectiveness in decentralized governance systems.

Ultimately, this study argues that in developing economies such as Indonesia, the success of fiscal decentralization should not be assessed solely based on regional economic growth performance, but rather on the extent to which fiscal policies are capable of directly improving social welfare and reducing structural inequality.

METHOD

This study employs a quantitative research approach with a causal-comparative design to examine the structural relationships between fiscal decentralization, economic growth, and social welfare across Indonesian provinces. The analytical framework is developed to evaluate both the direct and indirect effects of fiscal decentralization on welfare outcomes by positioning economic growth as an intervening variable within a multidimensional structural model. In contrast to conventional econometric approaches that generally treat fiscal and welfare indicators as single-dimensional variables, this study conceptualizes both fiscal decentralization and social welfare as formative latent constructs composed of complementary indicators that jointly represent broader socioeconomic phenomena. Consequently, the Structural Equation Modeling–Partial Least Squares (SEM-PLS) approach was selected due to its suitability for modeling complex formative relationships and mediation structures in multidimensional policy analysis (Hair et al., 2021; Sarstedt et al., 2019).

The empirical analysis uses balanced annual panel data covering all 34 provinces in Indonesia during the 2020–2024 period, resulting in 170 observational units.

Secondary data were obtained from official government institutions, including the Central Statistics Agency (BPS-Statistics Indonesia), the Directorate General of Fiscal Balance of the Ministry of Finance, and the Ministry of Home Affairs. The selected observation period captures the post-pandemic fiscal adjustment phase in Indonesia, characterized by substantial regional fiscal intervention, recovery-oriented public expenditure, and increasing intergovernmental transfer dynamics.

The structural model consists of four major components: exogenous constructs, mediating constructs, endogenous constructs, and structural control variables. Fiscal Decentralization is positioned as the principal exogenous latent construct and is formatively measured through three fiscal indicators: capital expenditure, total intergovernmental transfers, and realized local own-source revenue. These indicators collectively represent regional fiscal capacity, fiscal autonomy, and government spending intervention at the provincial level. Economic Growth is modeled as an intervening construct measured through investment growth and productive-sector GRDP growth. Meanwhile, Social Welfare functions as the primary endogenous construct and is represented by multidimensional social indicators consisting of the Gini ratio, poverty rate, real expenditure per capita, and life expectancy. In addition, the model incorporates structural control variables including average years of schooling, labor force participation rate, and population density in order to reduce omitted-variable bias and improve structural estimation stability. To provide a clearer representation of the conceptual structure, the latent-variable specification used in this study is summarized in Table 1.

Table 1. Structural Specification of Research Constructs

Construct Classification	Latent Variable / Construct	Formative Indicators
Main Exogenous Variable	Fiscal Decentralization	Capital Expenditure; Total Regional Transfers; Realized Local Own-Source Revenue
Mediating Variable	Economic Growth	Investment Growth Rate; Productive-Sector GRDP Growth
Main Endogenous Variable	Social Welfare	Gini Ratio; Poverty Rate; Real Expenditure per Capita; Life Expectancy
Structural Control Variable	Average Years of Schooling	Direct control variable
Structural Control Variable	Labor Force Participation Rate	Direct control variable
Structural Control Variable	Population Density	Direct control variable

The structural relationships estimated in the model include both direct and indirect pathways. The direct paths consist of the relationships between fiscal decentralization and social welfare, fiscal decentralization and economic growth, economic growth and social welfare, as well as the direct effects of the three control variables on social welfare. The indirect pathway evaluates the mediating role of economic growth in transmitting the influence of fiscal decentralization toward welfare outcomes.

The conceptual structure of the model can be mathematically expressed as follows:

$$EG = \beta_1 FD + \varepsilon_1 \dots \dots \dots (1)$$

$$SW = \beta_2 FD + \beta_3 EG + \beta_4 RLS + \beta_5 LFPR + \beta_6 PD + \varepsilon_2 \dots \dots \dots (2)$$

In the structural equations, Fiscal Decentralization (FD) represents the main exogenous construct reflecting regional fiscal capacity through local revenue realization, capital expenditure, and intergovernmental transfers. Economic Growth (EG) functions as the mediating construct capturing regional productive and investment expansion dynamics. Social Welfare (SW) serves as the primary endogenous construct representing multidimensional welfare outcomes measured through poverty, inequality, expenditure capability, and life expectancy indicators. Furthermore, Average Years of Schooling (RLS), Labor Force Participation Rate (LFPR), and Population Density (PD) are incorporated as structural control variables to account for differences in educational attainment, labor market participation, and demographic pressure across provinces. Meanwhile, the error term (ε) represents unexplained variance in the endogenous constructs that is not captured by the predictor variables included in the structural model.

The SEM-PLS estimation procedure was conducted using SmartPLS 4.0 software through a two-stage evaluation process consisting of measurement model assessment (outer model) and structural model assessment (inner model). In the outer model stage, formative indicator validity was evaluated using outer weight significance testing through bootstrapping with 5,000 resamples, alongside multicollinearity diagnostics using the Variance Inflation Factor (VIF). Following the recommendations of Hair et al. (2021), VIF values below the critical threshold indicate the absence of severe collinearity among formative indicators. Unlike reflective measurement models, formative constructs do not require internal consistency reliability because indicators are assumed to collectively form the latent construct rather than reflect a common underlying dimension.

The inner model evaluation focused on assessing the predictive and explanatory capabilities of the structural relationships among latent constructs. Path coefficient significance was tested using bootstrapping procedures to evaluate direct and indirect effects within the model. Predictive accuracy was further assessed using the coefficient of determination (R^2 and adjusted R^2), effect size (f^2), and predictive relevance (Q^2). The R^2 statistic measures the proportion of endogenous construct variance explained by predictor constructs, while the f^2 statistic evaluates the relative contribution of each exogenous construct to changes in explanatory power. In addition, predictive relevance was assessed using the Stone–Geisser Q^2 procedure through blindfolding techniques to determine the model’s out-of-sample predictive capability.

The selection of formative SEM-PLS is theoretically and methodologically justified for several reasons. First, fiscal decentralization and social welfare are inherently multidimensional constructs whose indicators are complementary rather than

interchangeable. Fiscal indicators such as local revenue, transfers, and capital expenditure capture different dimensions of regional fiscal capacity and therefore should not be assumed to move uniformly. Similarly, welfare indicators such as poverty, inequality, expenditure capability, and life expectancy represent distinct but interconnected dimensions of social outcomes. Consequently, formative specification provides a more appropriate representation of these constructs compared to reflective approaches (Hair et al., 2021).

Second, SEM-PLS offers substantial flexibility in handling non-normal data distributions and relatively moderate sample sizes, making it suitable for provincial panel analysis with limited cross-sectional units. Third, the method is particularly effective for estimating complex structural models involving mediation pathways, higher-order constructs, and predictive-oriented policy analysis (Sarstedt et al., 2019). Unlike covariance-based SEM, which prioritizes model fit confirmation, PLS-SEM emphasizes variance explanation and predictive capability, making it more appropriate for exploratory and policy-oriented research contexts such as fiscal decentralization and welfare analysis in developing economies.

Through this methodological design, the study aims to generate a more comprehensive understanding of whether fiscal decentralization contributes to welfare primarily through economic growth mechanisms or through more direct redistributive and social policy channels. By integrating multidimensional formative constructs within a predictive SEM-PLS framework, this study seeks to provide stronger empirical evidence regarding the effectiveness of decentralized fiscal governance in improving social welfare outcomes across Indonesian provinces.

RESULT

The structural model developed in this study evaluates the relationship between fiscal decentralization, economic growth, and social welfare at the provincial level in Indonesia using a formative SEM-PLS framework. Fiscal decentralization is specified as the main exogenous construct formed by capital expenditure, transfers to regions, and local own-source revenue realization. Economic growth is positioned as an intervening construct represented by investment growth and productive-sector GRDP growth, while social welfare is operationalized through multidimensional indicators consisting of real expenditure per capita, poverty, income inequality, and life expectancy. In addition, the model incorporates several structural control variables, namely average years of schooling, labor force participation rate, and population density, to reduce estimation bias and strengthen the robustness of the structural relationships.

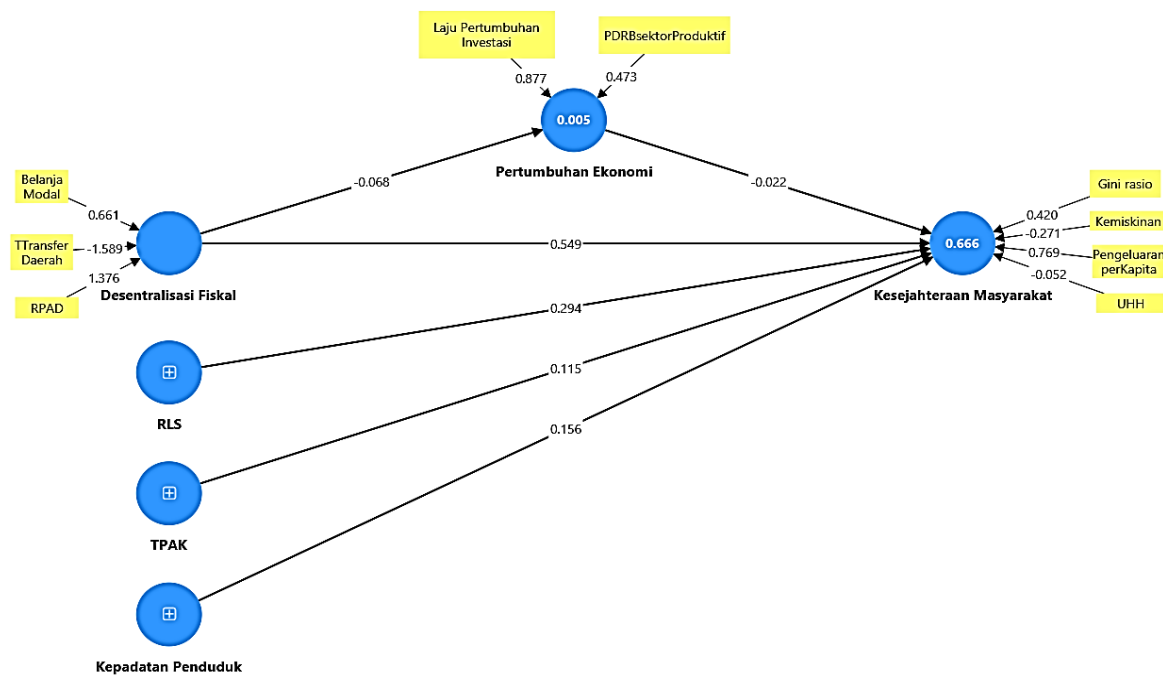


Figure 1. Structural Relationship Model of Fiscal Decentralization, Economic Growth, and Social Welfare

The estimation process was conducted using a variance-based structural modeling approach with formative specifications for the main latent constructs. The significance of all indicators and structural paths was assessed through a bootstrapping resampling procedure involving 5,000 subsamples. The empirical evaluation was carried out in two sequential stages consisting of outer model assessment and inner model assessment.

The outer model evaluation aims to examine the adequacy of the formative measurement model by assessing indicator collinearity and the contribution of each indicator in forming the latent constructs. In formative specifications, indicators are assumed to complement one another conceptually rather than reflect a single underlying dimension. Therefore, the emphasis of the evaluation is directed toward collinearity diagnostics and the statistical relevance of outer weights.

The first stage of the measurement model assessment evaluates potential multicollinearity among formative indicators using the Variance Inflation Factor (VIF). Low VIF values indicate that each indicator contributes unique explanatory information to the construct and does not overlap excessively with other indicators.

Table 2 presents the collinearity diagnostics for all formative indicators included in the model. Overall, the majority of indicators exhibit VIF values below the commonly accepted threshold, indicating that multicollinearity is not a major concern within the measurement model. Most indicators fall within the low-to-moderate collinearity range, suggesting that each variable contributes relatively distinct information in constructing the latent dimensions.

Table 2. Collinearity Diagnostics of the Measurement Model (Outer VIF)

Indicator	Construct	VIF
-----------	-----------	-----

Capital Expenditure	Fiscal Decentralization	4.87
Transfers to Regions	Fiscal Decentralization	5.294
Local Revenue Realization	Fiscal Decentralization	2.511
Growth Rate of Productive Sector GRDP	Economic Growth	1
Investment Growth Rate	Economic Growth	1
Real Expenditure per Capita	Social Welfare	1.393
Poverty	Social Welfare	2.057
Gini Ratio	Social Welfare	1.331
Life Expectancy	Social Welfare	1.849
Average Years of Schooling	Control Variables	1
Labor Force Participation Rate	Control Variables	1
Population Density	Control Variables	1

Source: Processed Data (2025)

Within the fiscal decentralization construct, transfers to regions exhibit the highest VIF value, followed by capital expenditure. Although the VIF value for transfers to regions slightly exceeds the conservative threshold, the magnitude remains within an acceptable tolerance range for formative measurement models and does not indicate severe collinearity problems. This suggests that the indicators remain empirically feasible for retention in the construct specification. The remaining indicators show relatively low VIF values, confirming satisfactory independence among the formative dimensions used in the model.

Following the collinearity assessment, the contribution of each formative indicator was evaluated through outer weight significance testing. This stage determines the relative importance of each indicator in forming its corresponding latent construct.

The results presented in Table 3 indicate that local revenue realization provides the strongest positive contribution to the fiscal decentralization construct and is statistically significant. Capital expenditure also contributes positively and significantly, suggesting that regional development spending forms an important component of fiscal decentralization capacity. In contrast, transfers to regions display a significant negative weight, indicating that higher dependence on intergovernmental transfers tends to weaken the dimension of regional fiscal autonomy embedded in the construct.

Within the economic growth construct, investment growth demonstrates a significant contribution, while productive-sector GRDP growth does not show statistical significance. This finding suggests that investment dynamics contribute more consistently to the economic growth construct compared to sectoral output growth during the observation period.

For the social welfare construct, real expenditure per capita emerges as the strongest and most significant indicator, followed by the Gini ratio. These findings indicate that purchasing power and income distribution constitute dominant dimensions in shaping

provincial welfare variation. Meanwhile, poverty and life expectancy do not exhibit statistically significant outer weights, although both indicators remain theoretically relevant within the multidimensional welfare framework.

Table 3. Significance Test of Formative Indicator Weights

Indicator	Construct	Original Sample (O)	Sample Mean (M)	STDEV	T-Statistics	P-Values
Capital Expenditure	Fiscal Decentralization	0.661	0.668	0.257	2.568	0.01
Transfers to Regions	Fiscal Decentralization	-1.589	-1.617	0.308	5.153	0
Local Revenue Realization	Fiscal Decentralization	1.376	1.39	0.16	8.615	0
Growth Rate of Productive Sector GRDP	Economic Growth	0.473	0.297	0.59	0.803	0.422
Investment Growth Rate	Economic Growth	0.877	0.641	0.399	2.197	0.028
Real Expenditure per Capita	Social Welfare	0.769	0.763	0.121	6.333	0
Poverty	Social Welfare	-0.271	-0.261	0.166	1.634	0.102
Gini Ratio	Social Welfare	0.42	0.409	0.083	5.056	0
Life Expectancy	Social Welfare	-0.052	-0.04	0.094	0.558	0.577
Average Years of Schooling	Control Variables	1	1	0	n/a	n/a
Labor Force Participation Rate	Control Variables	1	1	0	n/a	n/a
Population Density	Control Variables	1	1	0	n/a	n/a

Source: Processed Data (2025)

Despite several indicators exhibiting statistically weak contributions, all indicators were retained in the final model because formative constructs are evaluated not only on empirical significance but also on conceptual completeness. In this context, transfers to regions, poverty, and life expectancy remain theoretically essential in representing fiscal decentralization and multidimensional welfare. After confirming the adequacy of the measurement model, the analysis proceeds to the evaluation of the structural model. This stage examines the causal relationships among latent constructs and evaluates the explanatory and predictive capability of the model. The assessment includes structural collinearity diagnostics, coefficient of determination, effect size, predictive relevance, and structural path significance.

The structural collinearity test was conducted to ensure that predictor constructs do not exhibit excessive multicollinearity within the structural model. Table 3 shows that all structural relationships produce VIF values substantially below the critical threshold, indicating that the model estimation is free from serious collinearity issues.

Table 4. Structural Collinearity Diagnostics (Inner VIF)

Construct Relationship	VIF
Fiscal Decentralization → Social Welfare	2.625
Fiscal Decentralization → Economic Growth	1
Economic Growth → Social Welfare	1.027
Average Years of Schooling → Social Welfare	1.468
Labor Force Participation Rate → Social Welfare	1.265
Population Density → Social Welfare	2.681

Source: Processed Data (2025)

The results indicate that the predictor constructs maintain a satisfactory degree of independence, thereby supporting the robustness and stability of the structural estimates.

The explanatory power of the structural model was assessed using the coefficient of determination (R^2) and adjusted R^2 values. Table 5 shows that the social welfare construct achieves a relatively high explanatory power, indicating that the combined effects of fiscal decentralization, economic growth, and structural control variables account for a substantial proportion of welfare variation across provinces.

By contrast, the economic growth construct demonstrates extremely weak explanatory power, suggesting that fiscal decentralization alone does not adequately explain variations in provincial economic growth during the study period.

Table 5. Coefficient of Determination (R^2) of Endogenous Constructs

Endogenous Construct	R^2	Adjusted R^2	Interpretation
Social Welfare	0.666	0.656	Strong/Substantial
Economic Growth	0.005	-0.001	Very Weak

Source: Processed Data (2025)

These findings indicate that the structural relationship between fiscal decentralization and welfare is considerably stronger through direct channels rather than through economic growth transmission mechanisms.

The effect size analysis was performed to assess the relative contribution of each predictor construct to the endogenous variables. As presented in Table 6, fiscal decentralization exhibits a substantial effect on social welfare, confirming its central role in explaining provincial welfare disparities. Average years of schooling also demonstrates a moderate contribution, highlighting the importance of educational attainment in shaping welfare outcomes. In contrast, the effect of fiscal decentralization on economic growth and the effect of economic growth on social welfare are both negligible, indicating the absence of meaningful mediation effects within the structural model.

Table 6. Effect Size (f^2) of Structural Relationships

Construct Relationship	f^2	Interpretation
Fiscal Decentralization → Social Welfare	0.344	Moderate–Large
Fiscal Decentralization → Economic Growth	0.005	Negligible
Economic Growth → Social Welfare	0.001	Negligible
Average Years of Schooling → Social Welfare	0.177	Moderate
Labor Force Participation Rate → Social Welfare	0.031	Small
Population Density → Social Welfare	0.027	Small

Source: Processed Data (2025)

The predictive relevance of the model was further evaluated using the Stone–Geisser Q^2 statistic. Table 7 indicates that the social welfare construct possesses strong predictive capability, suggesting that the model is capable of accurately predicting welfare-related outcomes beyond the estimation sample.

Conversely, the economic growth construct produces a negative Q^2 value, indicating that the model lacks predictive relevance for explaining provincial economic growth patterns.

Table 7. Predictive Relevance (Q^2) of Endogenous Constructs

Endogenous Construct	Q^2 Predict	Interpretation
Social Welfare	0.626	Very Strong
Economic Growth	-0.003	Not Predictive

Source: Processed Data (2025)

The contrast between the predictive performance of the two endogenous constructs further reinforces the finding that fiscal decentralization is more strongly associated with direct welfare outcomes than with economic growth expansion.

The final stage of the analysis evaluates the significance and direction of the structural relationships among latent constructs. Figure 2 presents the complete structural model, including path coefficients and endogenous explanatory power.

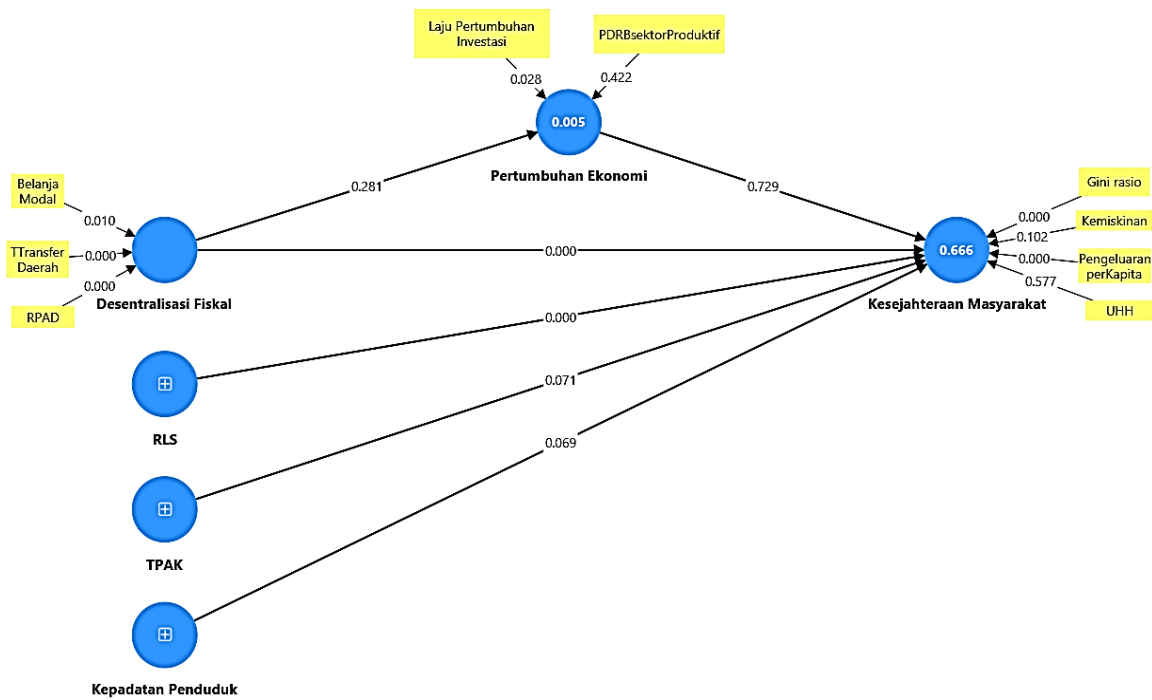


Figure 2. Structural Path Model and Endogenous Predictive Power

The direct effect estimation results are reported in Table 8. Fiscal decentralization demonstrates a positive and statistically significant effect on social welfare, indicating that stronger regional fiscal capacity contributes directly to improved welfare outcomes at the provincial level. However, the relationship between fiscal decentralization and economic growth is statistically insignificant. Similarly, economic growth does not exert a significant effect on social welfare. These findings indicate that economic growth does not function as an effective transmission channel linking fiscal decentralization to welfare improvement.

Among the control variables, average years of schooling exhibits a positive and significant effect on social welfare, while labor force participation rate and population density show only marginal significance.

Table 8. Direct Structural Path Coefficients

Structural Relationship	Coefficient (O)	T-Statistic	P-Value	Interpretation
Fiscal Decentralization → Social Welfare	0.55	7.146	0	Significant
Fiscal Decentralization → Economic Growth	-0.068	1.078	0.281	Not Significant
Economic Growth → Social Welfare	-0.022	0.346	0.729	Not Significant
Average Years of Schooling → Social Welfare	0.294	4.077	0	Significant
Labor Force Participation Rate → Social Welfare	0.115	1.808	0.071	Marginal
Population Density → Social Welfare	0.156	1.821	0.069	Marginal

Source: Processed Data (2025)

The mediation analysis was conducted to assess whether economic growth mediates the relationship between fiscal decentralization and social welfare. The indirect effect estimation presented in Table 9 reveals a very small and statistically insignificant mediation coefficient.

Table 9. Specific Indirect Effect Estimation

Structural Relationship	Coefficient (O)	T-Statistic	P-Value	Interpretation
Fiscal Decentralization → Economic Growth → Social Welfare	0.001	0.26	0.795	Not Significant

Source: Processed Data (2025)

The insignificant indirect pathway confirms that economic growth does not serve as an effective mediating mechanism in transmitting the impact of fiscal decentralization to social welfare. Instead, the empirical evidence consistently indicates that fiscal decentralization affects welfare outcomes primarily through direct social and redistributive channels rather than through macroeconomic growth dynamics.

DISCUSSION

This study demonstrates that fiscal decentralization exerts a strong and statistically significant direct effect on community welfare across Indonesian provinces. The positive relationship indicates that the expansion of regional fiscal capacity through local own-source revenue, capital expenditure allocation, and intergovernmental transfers contributes directly to improvements in multidimensional welfare indicators, including household purchasing power, poverty reduction, and quality-of-life outcomes. In contrast, economic growth was not empirically confirmed as an effective mediating variable. The indirect relationship between fiscal decentralization and welfare through economic growth was statistically insignificant, indicating that the transmission mechanism of decentralized fiscal policy in Indonesia operates more strongly through direct social expenditure channels rather than through aggregate output expansion. These findings imply that regional fiscal interventions are capable of generating welfare improvements even when regional economic growth remains weak or uneven.

The findings provide important evidence against the conventional assumption that economic growth automatically functions as the primary pathway linking fiscal decentralization and welfare improvement. Contemporary decentralization literature increasingly recognizes that in developing economies, fiscal decentralization may produce stronger redistributive and social-service effects than productivity-driven growth effects. In the Indonesian context, regional governments frequently allocate fiscal resources toward education services, healthcare provision, social assistance, village infrastructure, and targeted poverty alleviation programs, all of which have direct implications for welfare outcomes without necessarily generating immediate increases in gross regional domestic product. This indicates that fiscal decentralization in Indonesia has evolved beyond a purely efficiency-oriented framework and

increasingly performs a distributive and social stabilization function (Lago-Peñas & Martinez-Vazquez, 2013; Sepulveda & Martinez-Vazquez, 2011).

The Indonesian decentralization experience since the implementation of regional autonomy reforms has produced heterogeneous developmental outcomes across provinces. Provinces with abundant fiscal resources do not always achieve proportional improvements in welfare or inclusive growth. Several resource-rich provinces, particularly those dependent on extractive industries, often record high GRDP growth while simultaneously experiencing persistent poverty, inequality, and disparities in human development. This phenomenon reflects the existence of “non-inclusive growth,” where economic expansion is concentrated in capital-intensive sectors with limited spillover effects to local communities. The findings of this study support this structural reality by showing that welfare improvements are more closely associated with direct fiscal intervention than with aggregate economic growth performance. In many Indonesian provinces, especially outside Java, regional fiscal spending on education, health, and social protection appears to have greater welfare implications than sectoral growth itself.

This result is consistent with recent studies emphasizing the importance of fiscal quality and expenditure targeting in achieving social welfare outcomes. Research by Ginanjar et al. (2025) showed that fiscal transfers and sectoral economic structures in Indonesia significantly influence environmental quality and sustainable regional development, indicating that fiscal policy effectiveness depends not merely on growth generation but also on how fiscal resources are allocated toward broader social and ecological objectives (Ginanjar et al., 2025). Similarly, Safitri et al. (2023) found that welfare indicators such as expenditure capacity and human development dimensions play a stronger role in explaining regional development quality than economic growth alone, particularly within the provincial context of West Java (Safitri et al., 2023). These findings reinforce the argument that welfare-oriented fiscal management has become increasingly important within Indonesia’s decentralized governance structure.

The insignificant mediating role of economic growth also aligns with empirical evidence suggesting that regional economic expansion in Indonesia is frequently characterized by structural imbalance and unequal distribution. Growth in many provinces remains dominated by mining, commodity extraction, and large-scale infrastructure sectors, which often generate limited employment absorption and weak local multiplier effects. Consequently, increases in GRDP do not automatically translate into broad-based welfare improvements. This condition became increasingly visible after the COVID-19 recovery period, where some provinces experienced relatively rapid output growth while household welfare recovery remained slow and uneven. The present study therefore supports the argument that welfare-oriented fiscal policies may be more effective than growth-oriented policies in reducing social disparities under conditions of structural inequality.

The findings are also supported by micro-level welfare studies emphasizing the central role of household income and consumption in determining welfare conditions.

Ramlawati and Hilmi (2023) demonstrated that household consumption and income significantly affect farmer family welfare, highlighting that welfare improvements are closely tied to direct economic accessibility and purchasing power rather than macroeconomic growth indicators alone (Ramlawati & Hilmi, 2023). This perspective strengthens the interpretation that regional fiscal policies capable of directly improving household expenditure capacity may produce more immediate welfare impacts than policies aimed solely at increasing aggregate regional output.

Nevertheless, the results differ from several studies that identify economic growth as an effective intermediary channel between decentralization and welfare improvement. Some regional studies in Indonesia have found that fiscal decentralization stimulates investment, employment creation, and productive-sector expansion, which subsequently improve welfare conditions. These differences indicate that the effectiveness of the growth mediation pathway is highly contextual and influenced by variations in regional economic structure, institutional quality, fiscal management capacity, and expenditure composition. Provinces with stronger industrial diversification and higher-quality local governance may experience stronger growth-mediated welfare effects, whereas provinces with resource dependency and weaker institutional capacity tend to rely more heavily on direct redistributive fiscal mechanisms.

Another important implication of this study concerns the need to reassess the performance evaluation framework of regional fiscal policy in Indonesia. Regional fiscal success has traditionally been assessed using indicators related to budget absorption, revenue growth, and regional economic growth performance. However, the findings of this study suggest that such an approach may be insufficient for evaluating the substantive success of decentralization. Welfare-based indicators, including poverty reduction, real per capita expenditure improvement, social equity, and human development outcomes, should receive greater emphasis within regional fiscal evaluation systems. This perspective is increasingly relevant given the widening concern over inequality and uneven development among Indonesian provinces despite two decades of decentralization implementation.

From a theoretical perspective, this study contributes to the contemporary fiscal decentralization literature by emphasizing that decentralization outcomes in developing countries should not be interpreted solely through the lens of economic efficiency and growth optimization. Instead, decentralization must also be evaluated based on its redistributive effectiveness, social inclusion capacity, and ability to improve multidimensional welfare outcomes. The Indonesian case demonstrates that fiscal decentralization may function more effectively as a social policy instrument than as a direct engine of economic growth. Consequently, the study reinforces the argument that equitable welfare enhancement and inclusive fiscal governance are central objectives of decentralization policy in emerging economies.

CONCLUSION

This study confirms that fiscal decentralization plays a significant and direct role in improving community welfare across provinces in Indonesia. Regional fiscal capacity, represented by local own-source revenue, capital expenditure, and intergovernmental fiscal transfers, was empirically proven to contribute positively to multidimensional welfare outcomes, including poverty reduction, improved purchasing power, and better social quality indicators. In contrast, economic growth was not found to function as an effective mediating variable in the relationship between fiscal decentralization and welfare. The structural model consistently shows that the transmission of fiscal policy toward welfare improvement operates more strongly through direct social expenditure channels rather than through aggregate regional economic growth mechanisms. These findings indicate that increases in regional fiscal resources do not automatically generate inclusive economic growth capable of improving welfare evenly across provinces.

The results also demonstrate that the effectiveness of decentralization in Indonesia is highly dependent on the quality and orientation of public expenditure allocation. In many provinces, welfare improvements appear to be more responsive to direct fiscal intervention in education, health, social protection, and basic public services than to increases in GRDP growth itself. This reflects the structural characteristics of the Indonesian economy, where regional economic growth is often concentrated in extractive and capital-intensive sectors with relatively weak multiplier effects on local communities. Consequently, fiscal decentralization in Indonesia should not merely be interpreted as an instrument for increasing regional economic productivity, but also as a mechanism for strengthening social redistribution and reducing interregional welfare disparities.

From a theoretical perspective, this study contributes to the development of contemporary fiscal decentralization literature by reinforcing the argument that welfare-oriented outcomes are more relevant than growth-oriented outcomes in evaluating decentralization effectiveness in developing countries. The findings challenge the conventional assumption that economic growth is always the primary channel through which decentralization improves welfare. Instead, this study emphasizes that direct fiscal intervention and socially targeted expenditure can produce more measurable and immediate welfare impacts, particularly in economies characterized by structural inequality and uneven regional development.

In terms of policy implications, the findings highlight the urgency of reorienting regional fiscal evaluation frameworks in Indonesia. Fiscal performance assessment should no longer rely predominantly on macroeconomic indicators such as GRDP growth or budget absorption rates, but should increasingly prioritize outcome-based indicators related to welfare improvement, poverty alleviation, social equity, and human development quality. Regional governments are therefore encouraged to strengthen expenditure effectiveness in sectors directly associated with public welfare,

including education, healthcare, social assistance, labor empowerment, and inclusive infrastructure development. In addition, central government transfer mechanisms should be designed not only to stimulate economic activity but also to reduce structural disparities between provinces and improve equitable access to basic public services.

Despite providing important empirical contributions, this study still has several limitations. The analysis is limited to provincial-level panel data, which may not fully capture fiscal and welfare heterogeneity at the district and municipal levels, where decentralization dynamics are often more complex and unequal. Furthermore, the economic growth construct was represented mainly by productive-sector growth and investment growth indicators, which may not comprehensively reflect broader structural dimensions such as labor productivity, informality, technological transformation, or interregional economic connectivity. Future studies are therefore recommended to employ district or municipal panel data with longer observation periods and incorporate institutional governance variables such as audit quality, fiscal efficiency ratios, bureaucratic reform indicators, or public service performance measures. Further research may also benefit from integrating spatial econometric approaches, such as the Spatial Durbin Model or Geographically Weighted Regression, to examine fiscal spillover effects between regions. In addition, mixed-method approaches combining quantitative analysis with case studies and in-depth interviews with regional policymakers could provide richer contextual understanding regarding fiscal decision-making processes and the effectiveness of social spending implementation across regions in Indonesia.

REFERENCE

- Aisyah, S. (2025). *Dampak Belanja Modal Dan Pendapatan Asli Daerah Terhadap Pertumbuhan Ekonomi Dan Kesejahteraan Masyarakat Sebagai Variabel Intervening Di Sulawesi Selatan*. *ICOR: Journal of Regional Economics*, 6(01), 1-13.
- Asatryan, Z., Feld, L. P., & Geys, B. (2015). Partial fiscal decentralization and sub-national government fiscal discipline: empirical evidence from OECD countries. *Public Choice*, 163(3), 307-320. <https://doi.org/10.1007/s11127-015-0250-2>
- Canavire-Bacarreza, G., Martinez-Vazquez, J., & Yedgenov, B. (2020). Identifying and disentangling the impact of fiscal decentralization on economic growth. *World Development*, 127, 104742. <https://doi.org/10.1016/j.worlddev.2019.104742>
- Eyraud, L., & Lusinyan, L. (2013). Vertical fiscal imbalances and fiscal performance in advanced economies. *Journal of Monetary Economics*, 60(5), 571-587. <https://doi.org/10.1016/j.jmoneco.2013.04.012>
- Ginanjar, R. A. F., Sutjipto, H., Suharto, U. S., Suska, S., Zaki, M., & Sardjasmita, A. (2025). Balancing growth and green: The role of forests, fiscal transfers, and sectoral growth in Indonesia's environmental quality. *Jurnal Riset Ilmu Ekonomi*, 5(1), 1-19. <https://doi.org/10.23969/jrie.v5i1.176>

- Ginting, A. M. (2022). Impact of fiscal decentralization on the public service in Indonesia. *Kajian*, 27(2), 169-182.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook. In *Classroom Companion: Business*. Springer International Publishing. <https://link.springer.com/10.1007/978-3-030-80519-7>
- Jean-Paul, F., & Martine, D. (2018). Beyond GDP measuring what counts for economic and social performance: measuring what counts for economic and social performance. *OECD Publishing*.
- Jin, Y., & Rider, M. (2022). Does fiscal decentralization promote economic growth? An empirical approach to the study of China and India. *Journal of Public Budgeting, Accounting & Financial Management*, 34(6), 146–167. <https://doi.org/10.1108/JPBAFM-11-2019-0174>
- Kanbur, R., Patel, E., & Stiglitz, J. (2018). Sustainable development goals and measurement of economic and social progress. *For good measure: Advancing research on well-being metrics beyond GDP*, 33-48.
- Khoirunisa, I., & Sulaeman, A. S. (2022). Fiscal Decentralization: Is There a Simultaneous Relationship Between Regional Independence and Social Welfare? . *Jurnal Tata Kelola Dan Akuntabilitas Keuangan Negara*, 8(2), 213–226. <https://doi.org/10.28986/jtaken.v2i1.848>
- Lago-Peñas, S., & Martinez-Vazquez, J. (Eds.). (2013). The challenge of local government size: theoretical perspectives, international experience and policy reform. *Edward Elgar Publishing*.
- Pambudy, A., & Syairozi, M. (2019). Analisis Peran Belanja Modal Dan Investasi Swasta Terhadap Pertumbuhan Ekonomi Serta Dampaknya Pada Kesejahteraan Masyarakat. *Jurnal Ekonomi dan Bisnis*, 20(1), 26-39. doi:<https://dx.doi.org/10.30659/ekobis.20.1.26-39>
- Ramlawati, R., & Hilmi, H. (2023). Pengaruh pendapatan dan konsumsi rumah tangga terhadap kesejahteraan keluarga petani: Studi kasus Desa Janja Kompi Kecamatan Lampasio Kabupaten Tolitoli. *Jurnal Riset Ilmu Ekonomi*, 3(1), 36–46. <https://doi.org/10.23969/jrie.v3i1.42>
- Safitri, S., Saepudin, T., Suryaman, R., Priadana, M., & Kusdiana, D. (2023). The role of community welfare indicators in the quality of human development and economic growth in West Java Province. In *Proceedings of the 6th International Conference of Economics, Business, and Entrepreneurship (ICEBE)* (pp. 13–14). <http://dx.doi.org/10.4108/eai.13-9-2023.2341137>
- Sarstedt, M., Hair, J. F., Cheah, J.-H., Becker, J.-M., & Ringle, C. M. (2019). How to Specify, Estimate, and Validate Higher-Order Constructs in PLS-SEM. *Australasian Marketing Journal*, 27(3), 197–211. <https://doi.org/10.1016/j.ausmj.2019.05.003>
- Sepulveda, C. F., & Martinez-Vazquez, J. (2011). The Consequences of Fiscal Decentralization on Poverty and Income Equality. *Environment and Planning C: Government and Policy*, 29(2), 321–343. <https://doi.org/10.1068/c1033r>

- UNDP. (2022). Human development report 2021/2022: Uncertain times, unsettled lives. UNDP.
- Weingast, B. R. (2014). Second generation fiscal federalism: Political aspects of decentralization and economic development. *World Development*, 53, 14–25. <https://doi.org/10.1016/j.worlddev.2013.01.003>