Research Article

Regional Original Revenue, Government Expenditure, and Investment in Relation to Economic Growth in West Sulawesi

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Abstract.

Economic growth is a process in which a country's economic conditions continuously change into conditions perceived as better over a specific period. This study aims to demonstrate the influence of local revenue, regional expenditure, and investment on economic growth in West Sulawesi. The research method employs a descriptive quantitative approach. The population and sample use are saturated or total sampling of time series data from 2017 to 2022, calculated weekly. Data analysis uses path analysis. The results show a direct influence between exogenous and endogenous variables. Local revenue and regional expenditure positively but insignificantly affect economic growth. The contribution of local revenue to the total regional budget is small compared to balanced funds or other sources, resulting in a minor impact on economic growth. The positive but insignificant regional expenditure is due to its potential contribution, which has not yet been optimized. This condition can be addressed by improving efficiency, designing more productive spending, and directing the budget to strategic sectors with both direct and long-term impacts on the regional economy. Meanwhile, investment negatively and significantly affects economic growth. This indicates that increased investment is associated with a decline in economic growth, reflecting inefficiencies, misaligned investment directions, or structural challenges in optimizing investments.

Keywords: local revenue, regional expenditure, investment, economic growth

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1. Introduction

Regional development plays a crucial role in driving national progress. One indicator of regional development is economic growth, which reflects a region's ability to increase income and improve the welfare of its population. Economic growth refers to a sustainable development process in a country's or region's economy, marked by continuous improvements in living standards over time.

According to Samuelson and Nordhaus [1], economic growth is a long-term increase in the capacity of an economy to supply increasingly diverse economic goods to its population. Advancements in technology and institutional arrangements support this increase. Similarly, Todaro and Smith [2] explain that economic growth is the process of

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increasing the productive capacity of an economy, generally measured by the growth rate of real gross domestic product (GDP). These definitions emphasize the importance of growth as a key development goal.

Several factors, including fiscal capacity and investment, influence regional economic growth. Local Own-Source Revenue (PAD), for instance, represents the ability of regional governments to generate income independently to fund local development. According to Law No. 33 of 2004 concerning Fiscal Balance between the Central Government and Regional Governments, PAD includes revenues from local taxes, levies, regional asset management, and other legitimate sources. An increase in PAD is expected to strengthen fiscal independence and encourage the development of strategic sectors.

Another contributing factor to regional growth is regional expenditure. Government spending plays an essential role in financing public services and development programs. The effectiveness of regional expenditure depends on how well the budget is managed and allocated to sectors with high potential to stimulate economic activity. Strategic and productive spending can contribute to infrastructure improvement, education, health, and the overall quality of human capital.

Investment is also a fundamental driver of regional economic growth. Increases in investment lead to the formation of new capital goods that improve production capacity and labor absorption. Investment in infrastructure, technology, and productive sectors generates economic multiplier effects, which positively impact employment and income levels in the region.

This study aims to analyze the effect of Local Own-Source Revenue (PAD), regional expenditure, and investment on economic growth in West Sulawesi Province from 2017 to 2022. The findings of this research are expected to provide insights that can be used to support evidence-based regional development planning and budgeting policies in West Sulawesi.

2. Methods

This research is based on the theoretical framework of economic growth and regional fiscal management, particularly focusing on Local Own-Source Revenue (PAD), regional expenditure, and investment. These three components are the independent (exogenous) variables, while economic growth is the dependent (endogenous).

Economic growth is generally defined as an increase in an economy's capacity to produce goods and services over a specific period. Samuelson and Nordhaus [1]describe economic growth as a long-term increase in a country's production of goods and services, supported by technological and institutional advancement. Furthermore, Todaro and Smith [2] emphasize that economic growth is not only about increases in output but also improvements in the quality of life, employment, and income distribution. These definitions are the foundation for understanding economic growth as a quantitative and qualitative economic transformation.

Local Own-Source Revenue (PAD) is an essential indicator of regional financial independence. PAD includes income derived from local taxes, levies, regional asset management, and other legitimate sources, as stipulated in Law No. 33 of 2004 on Fiscal Balance between the Central and Regional Governments. In principle, PAD reflects a region's ability to fund its development without relying heavily on central government transfers. However, many areas still struggle to optimize PAD in practice due to limited economic bases and weak tax administration systems.

Regional expenditure refers to government spending to support governance, development, and public services. When managed effectively, regional spending can stimulate economic activity by enhancing infrastructure, increasing access to education and health services, and strengthening human resource capacity. Productive expenditure, such as capital investment and social programs, can long-term impact regional development and poverty reduction. Therefore, expenditure policy is expected to contribute positively to economic growth when appropriately planned and implemented.

Conversely, investment plays a central role in expanding the capital stock and accelerating production capacity. Investment contributes to economic growth through infrastructure development, technology adoption, and the creation of new business opportunities. Increased investment, both public and private, leads to higher employment, improved productivity, and income generation. Investment in key sectors of the economy is often used as a proxy for economic health and future growth prospects.

These four variables—economic growth, PAD, regional expenditure, and investment—are interlinked within the study's analytical framework. Path analysis is used to measure the direct relationships between the exogenous variables (PAD, regional expenditure, and investment) and the endogenous variable (economic growth) to understand the

strength and direction of influence each component holds within the regional development context of West Sulawesi. The method used in this study is quantitative. Quantitative research is research in which the data are quantitative, so the data analysis uses quantitative (inferential) analysis. It is systematic, planned, and clearly structured through the research design. This study's research location is West Sulawesi Province, where the research object is the West Sulawesi Government from 2017 to 2022. The data analyzed is sourced from the Central Bureau of Statistics (Badan Pusat Statistik/BPS) and accessed through the official BPS website, specifically economic growth data.

This study's population includes all regional original income (PAD) data, regional expenditure, investment, and economic growth in West Sulawesi from 2017 to 2022. It uses a saturated sample or total sampling technique, where all members of the population are used as the sample. The data are time series data from 2017 to 2022, calculated weekly.

The data analysis method used in this study is path analysis with the assistance of the SPSS program. Path analysis for substructure path 1 uses multiple regression analysis, illustrating the influence relationship between more than one independent variable and one dependent variable. This means that changes in the value of Y are not solely influenced by one particular X value, but are affected by multiple X values

3. Results and Discussion

The results and discussion on regional revenue (PAD), regional spending, and investment related to West Sulawesi's economic growth. The analysis of the correlation coefficients for the variable PAD (X1) with regional spending (X2) yielded 0.428, regional spending (X2) with economic growth (Y1) yielded 0.273, and investment (X3) with economic growth (Y1) yielded -0.352, indicating correlations between the variables with a probability 0.05, which means not significant. The significant correlation coefficient results indicate a strong relationship between the tested variables. In contrast, those that are not substantial mean that the relationship between the variables is not strong enough or reliable.

The significant relationship between PAD and regional spending indicates a proven connection between regional income and regional expenditure, suggesting that the higher the PAD, the greater the regional spending, or vice versa. This significance is usually tested using statistical tests (e.g., t-test) and assessed through the p-value. If

the p-value is less than 0.05, the relationship between PAD and regional spending is considered statistically significant. This relationship can illustrate how regional income affects the local government's ability to spend on development and services to the community. However, it should also be noted that this relationship may vary depending on regional economic conditions, local government policies, and other factors.

Meanwhile, the variables showing insignificant correlations are PAD with investment, PAD with economic growth, and regional spending with investment. The analysis results indicate that PAD (Regional Original Revenue) and regional spending are not significant concerning economic growth, which means that, based on the data used, there is not enough strong statistical evidence to show that PAD and regional spending have a direct or substantial impact on economic growth.

The coefficient of determination (R Square) is 0.642 (64.2%), and the adjusted R square is 0.413 (41.3%). The adjusted R-squared value indicates that the economic growth variable can be explained by the regional revenue, regional expenditure, and investment variables together by 0.413 or 41.3%, with the remaining 58.7% (100% - 41.3%) likely explained or influenced by other variables outside of this model. Furthermore, an F test was conducted to collectively measure the effect of exogenous or independent variables on endogenous or dependent variables.

Based on the SPSS results in the ANOVA table above, the calculated F value is 15.924 with a probability of 0.000. Meanwhile, for the F table at a significant level of 0.05, the degrees of freedom (df) for df1 = 3, df2 = (72-3-1) = 68, so the F table value is 2.740. The calculated F value of 15.924 exceeds the table value of 2.740. The following t-test results show.

The calculated t values for the regional revenue variable (X1), regional expenditure (X2), and investment (X3) against economic growth (Y1). With a t-table value at a significant level of 0.05, the t-table is 1.993. It is known that the calculated t value for the regional revenue variable (X1) is -0.289 with a probability of 0.773 > 0.05, indicating that regionally the revenue has a negative and insignificant effect on economic growth (Y1), as the calculated t value of -0.289 is smaller than the t table value of 1.993 and the probability is greater than 0.05.

The calculated t value for the regional expenditure variable (X2) is 2.047 with a probability of 0.045 < 0.05, indicating that the regional expenditure has a positive and significant effect on economic growth (Y1), as the calculated t value of 2.047 is greater than the t table value of 1.993 and the probability is less than and close to 0.05. The

calculated t value for the investment variable (X3) is 6.380 with a probability of 0.000 < 0.05, indicating that investment has a positive and significant effect on economic growth (Y1), as the calculated t value of 6.380 is greater than the t table value of 1.993 and the probability is less than 0.05.

Partial test of PAD, regional expenditure, and investment on economic growth, as well as the residual value, is obtained from 1 - adjusted R square, specifically 1 - 0.413 = 0.587. Therefore, the equation from the path analysis of sub-structure Figure 1 is as follows:

Y1 =
$$\rho$$
y1x1 + ρ y1x2 + ρ y1x3 + ϵ 1
Y1 = -0.084 + 0.422 + 1.183 + 0.587

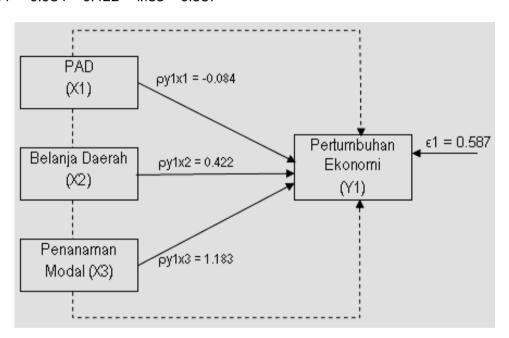


Figure 1: causal path analysis.

Description:

 ρ y1x1 = Path coefficient between local revenue (X1) and economic growth (Y1) ρ y1x2 = Path coefficient between regional spending (X2) and economic growth (Y1) ρ y1x3 = Path coefficient between investment (X3) and economic growth (Y1) ε 1 = Residual coefficient or residual error

Based on the causal path analysis results for substructure 1, there is one negative and insignificant influence path and two positive and significant influence paths. PAD (Local Own-Source Revenue) is the negative and insignificant path toward economic growth. PAD is an essential indicator in measuring the autonomy of a region in financing development. PAD includes revenues sourced from local economic potential, such

as regional taxes, local levies, proceeds from regional asset management, and other legitimate income. Ideally, an increase in PAD should positively contribute to regional economic growth. However, in some cases, PAD can show a negative and insignificant influence on economic development in West Sulawesi. This may be due to several factors, including the small proportion of PAD in the regional budget. The PAD of West Sulawesi still has a small share compared to the total regional income, which includes transfer funds from the central government, such as the General Allocation Fund (DAU) and the Special Allocation Fund (DAK). With a small contribution of PAD, increases or decreases in PAD do not significantly impact development spending that affects economic growth [3].

Other factors include the efficiency of managing Local Owned Revenue (PAD). This is reflected in several cases where West Sulawesi's PAD is not accompanied by efficient management [4]. For instance, PAD is used for employee expenses or other operational needs that do not directly impact the community's economy. As a result, even though PAD increases, its effect on economic growth becomes insignificant. If revenues from PAD are not directed towards investments in productive sectors, such as infrastructure, education, and health, then stimulating economic growth will be difficult. Funds allocated to non-productive industries tend to have a low multiplier effect. Furthermore, weaknesses in local governance, such as corruption, lack of transparency, and accountability in using PAD, can diminish the positive impact of PAD on economic growth [5]. This creates inefficiencies in resource allocation.

The negative influence of PAD may also reflect the weak fiscal capacity of regions to tap into their local economic potential. This can occur due to a lack of innovation in managing local taxes and levies or a shortage of human resources in the local financial administration sector. Therefore, the West Sulawesi Regional Government must ensure that PAD is managed efficiently and directed towards sectors supporting economic growth, such as infrastructure, MSMEs, and tourism. Continuously explore local economic potential optimally through innovation in tax and levy collection and improvements in public services. PAD's negative and insignificant impact on economic growth indicates structural issues in managing local finances. Improvements in PAD management and more effective regional economic development strategies are necessary to enhance its impact. Thus, PAD can genuinely be an instrument that supports economic growth and community welfare [6].

Furthermore, regional spending and investment have two positive and significant influences on economic growth. Economic growth is an essential indicator of a region's

success in improving the welfare of its people. In West Sulawesi, regional spending and investment are significant in driving economic activity and accelerating economic growth. Regional spending serves as the primary instrument for local governments to implement development. The positive and significant impact of regional expenditures on economic growth in West Sulawesi can be explained through several mechanisms, such as infrastructure improvement. Most regional spending is allocated for infrastructure development, including roads, bridges, healthcare facilities, and education [7]. Adequate infrastructure improves regional accessibility, reduces logistics costs, and enhances economic connectivity. Regional spending, particularly capital expenditure, stimulates aggregate demand through development projects that create jobs and increase the community's purchasing power. Foreign and domestic investments are crucial in accelerating economic development in West Sulawesi. Its positive impacts include increased productivity, where investments in strategic sectors such as agriculture, palm oil plantations, and fisheries have enhanced local productivity. With the technology brought by investors, production efficiency has increased. Significant investment creates new job opportunities, reduces unemployment, and raises community income [8].

Foreign investment brings new technology and skills the local community can adopt, enhancing the region's economic competitiveness. Capital investment encourages economic diversification, so West Sulawesi does not only rely on traditional sectors but also on modern sectors such as processing industries and tourism. The West Sulawesi local government consistently increases the portion of capital expenditure in the regional budget, ensuring that spending allocation is more directed toward infrastructure development and strategic programs. Regional spending and capital investment positively and significantly impact West Sulawesi's economic growth through infrastructure improvements, job creation, and economic diversification. With good management and supportive policies, these two factors can continue to be optimized to improve the welfare of the people of West Sulawesi and make the region more competitive at the national level.

4. Conclusion

Based on the research findings and discussion regarding PAD (Regional Original Income), regional expenditure, and investment in economic growth in West Sulawesi, the results of path analysis for sub-structure one show that PAD has a negative and insignificant effect on economic growth. This indicates that PAD is still less productive

and inefficient, so its role has not yet been optimal in driving economic growth, especially if regional income is mainly allocated to non-productive expenditures.

Meanwhile, regional expenditure and investment have a positive and significant effect on economic growth in West Sulawesi, meaning that government intervention through strategic regional spending and pro-investment policies can serve as the main drivers of regional economic development.

Local governments need to improve the effectiveness and efficiency of PAD management so that its contribution to economic development can be more optimal. The allocation of regional expenditure should focus on productive sectors that directly impact economic growth and public welfare. Furthermore, policies to attract and support investment should be prioritized, including strengthening the investment climate, providing incentives, and improving supporting infrastructure. With proper management efforts, these three components can complement each other in achieving sustainable and inclusive economic growth.

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