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The Influence of Regional Own-Source Revenue, General Allocation Funds, Special Allocation Funds, and Capital Expenditure on Regional Financial Independence Through Economic Growth in North Sulawesi Province

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Regional Original Revenue; General Allocation Fund; Special Allocation Fund; Capital Expenditure; Economic Growth; Regional Financial Independence; North Sulawesi

ABSTRACT
Regional financial independence poses a major challenge to Indonesia's fiscal decentralization due to the nation's heavy reliance on central government transfers, such as the General Allocation Fund (DAU) and the Special Allocation Fund (DAK). This issue is further compounded by inefficient management of local own-source revenue (PAD) and suboptimal allocation of capital expenditure (CE), which negatively impact infrastructure development and economic growth. Fiscal disparities among regions also exacerbate economic inequalities, hindering progress toward sustainable financial independence. This study aims to examine the effects of PAD, DAU, DAK, and CE on regional financial independence through the lens of economic growth in North Sulawesi Province. Using secondary data from 2011 to 2023, path analysis was employed to explore both direct and indirect relationships among the variables. The findings reveal that PAD significantly and positively influences both economic growth and regional financial independence. While DAU and DAK address fiscal requirements, their impacts on economic growth and financial independence vary. These results highlight the critical need to optimize PAD and capital expenditure allocation to foster economic growth and reduce dependency on central government transfers.

Introduction

Regional financial independence has become a crucial issue in the global economic landscape. Many developing countries, including Indonesia, face challenges in achieving fiscal independence due to their reliance on a centralized financial system. This dependence is further exacerbated by global crises such as the COVID-19 pandemic, which significantly disrupted economic stability and highlighted the vulnerability of regions with limited financial independence. Financial decentralization has emerged as an important strategy to empower local governments, allowing them to manage resources effectively and support regional development (Halim, 2007). However, achieving this autonomy is not easy because many factors affect its success.

There are several factors that contribute to the ongoing challenges in achieving regional financial independence in Indonesia. One of the main factors is the low optimization of Regional Original Revenue (PAD), which limits the fiscal capacity of local governments. These limitations force regions to rely heavily on transfers from the central government, such as the General Allocation Fund (DAU) and the Special Allocation Fund (DAK), which often undermine the expected autonomy of decentralization policies (Mukaromah & Budhi, 2024; Salampessy, 2011; Zulkifli et al., 2024). In addition, inefficient allocation of capital expenditure has a negative impact on infrastructure development, which is a major driver of economic activity and growth (Wong, 2004). The economic gap between regions, arising from uneven fiscal readiness, further complicates efforts to achieve fiscal independence because some regions have difficulty managing resources effectively (Adi, 2005).

These factors have a variety of impacts that highlight the importance of systematically addressing these issues. First, the economic gap between regions remains a significant problem, with less developed regions having difficulty catching up with more developed regions. This inequality limits the country's overall growth potential. In addition, excessive reliance on central funding mechanisms reduces local government accountability and innovation, making it difficult for them to respond effectively to community needs. The inability to optimize capital expenditure further limits infrastructure development, which is crucial for improving public services and boosting economic activity. As a result, regional economic growth often does not reach the national target, as seen in the data on fluctuations in North Sulawesi's Gross Regional Domestic Product (GDP) (BPS, 2024).

This study focuses on the core variables that shape regional financial independence: PAD, DAU, DAK, and capital expenditure. Each variable has a different role in the fiscal and economic dynamics of a region. PAD reflects the intrinsic fiscal strength of an area, which comes from local resources such as taxes and levies. DAU and DAK, on the other hand, are central transfers aimed at closing fiscal gaps and funding specific development priorities. Meanwhile, capital expenditure reflects investment in long-term assets and infrastructure that are essential for sustainable economic growth (Putra & Usman, 2024; Setiawan et al., 2021). The relationship between these variables significantly determines the fiscal resilience and autonomy of a region, especially in its ability to face economic challenges and opportunities.

This research makes a new contribution to the understanding of fiscal decentralization and regional financial independence. This study uses the latest economic data from 2011 to 2023, thus providing contemporary insights into the interactions between the variables studied. The use of path analysis allows for an in-depth examination of the direct and indirect effects of fiscal variables on financial independence and economic growth. In addition, by focusing on North Sulawesi—a region that has received less attention in the existing literature—this research aims to fill a critical gap in understanding the unique challenges and opportunities of fiscal decentralization in Indonesia.

The urgency of this research lies in its potential to provide guidance to policymakers in optimizing fiscal strategies to achieve regional financial independence. As North Sulawesi continues to navigate its economic development amid fluctuating fiscal capacity and dependency, this study provides timely and important analysis of the path to greater autonomy. By addressing inefficiencies in PAD excavation, transfer dependence, and capital expenditure utilization, this study can offer practical recommendations to encourage equitable and sustainable regional development.

The purpose of this study is multifaceted, which aims to provide a comprehensive analysis of the relationship between PAD, DAU, DAK, and CE with economic growth and regional financial independence. These findings are expected to contribute to the literature on fiscal decentralization while providing practical insights for policymakers and local governments in North Sulawesi. By identifying the mechanisms by which these variables affect fiscal autonomy, this study aims to increase the capacity of regions to achieve self-reliance and promote sustainable economic growth.

This research is also expected to have significant benefits for various stakeholders. For local governments, this study provides practical guidance to improve fiscal management and reduce dependence on central transfers. For academic researchers, this study offers a strong empirical framework for exploring fiscal decentralization in other emerging economies. For policymakers, these findings serve as the basis for designing fair and effective economic policies that address regional disparities and support national growth goals.

Materials and Methods

This study employs a quantitative method with a focus on numerical data to investigate the causal link between independent and dependent variables. The secondary data used came from the North Sulawesi Provincial Regional Finance and Assets Agency, the North Sulawesi Central Statistics Agency (BPS), as well as other sources such as budget realization reports and academic studies. Data collection techniques include documentation, literature studies, and the use of online information sources. This study measures the relationship between PAD, DAU, DAK, and CE on the level of regional financial independence through intervening variables in the form of economic growth.

The research variables include dependent variables, namely the level of regional financial independence, which represents the region's ability to fund needs without relying on central transfers, as well as independent variables such as PAD, DAU, DAK, and CE. In addition, economic growth as an intervening variable is used to explain how independent variables affect regional independence. Path analysis was applied to identify the direct and indirect influence of each variable, using the t-test, the sobel test for the mediation effect, and the determination coefficient (R^2) analysis to evaluate the contribution of variables to the research results.

Result and Discussion

Research Equation Model

This study uses a path analysis that measures the direct and indirect impacts of PAD (X1), DAU (X2), DAK(X3), CE (X4) on Regional Financial Independence (Y) through Economic Growth (Z).

The secondary data was estimated using the OLS (Ordinary Least Square) method of multiple regression analysis described in the previous chapter and processed using the Eviews 8.0 program. The regression equation model that can be formulated is as follows:

Z = PZX1 + PZX2 + PZX3 + PZX4 + e1 .... (1)

Y = PyX1 + PyX2 + PyX3 + PyX4 + PyZ + e2 .... (2)

Table 1. Regression Results I

Dependent Variable: Z
Method: Least Squares
Date: 11/14/24 Time: 17:36
Sample: 2009 2023
Included observations: 15

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.829664	26.45917	0.106945	0.9169
X1	0.005356	0.010816	0.495224	0.6311
X2	0.000523	0.020302	0.025736	0.9800
X3	-0.000858	0.002172	-0.395202	0.7010
X4	-0.005599	0.004857	-1.152703	0.2758

R-squared	0.277928	Mean dependent var	1.664667
Adjusted R-squared	-0.010900	S.D. dependent var	0.478075
S.E. of regression	0.480673	Akaike info criterion	1.633942
Sum squared resid	2.310465	Black criterion	1.869959
Log likelihood	-7.254568	Hannan-Quinn criter.	1.631428
F-statistic	0.962261	Durbin-Watson stat	2.048686
Prob(F-statistic)	0.469066		

Source: Eviews 8.0 Results

Regression equations formed from the results of eviews data processing

Z = 2.829664 + 0.005356 X1 + 0.000523 X2 - 0.000858 X3 - 0.00559 X4 e1 ...... (1)

According to Table 1, the coefficients table above displays the findings of the path analysis regression equation, which:

1. The constant value of 2.829664 shows that if the variables PAD (X1), DAU (X2), DAK (X3) and CE (X4) have a value of 0 (zero), then the value of Economic Growth is 2.829664.
2. The regression coefficient of PAD (X1) of 0.005356 means that the PAD variable (X1) shows that there is an influence on Economic Growth and has a positive pattern so that the more PAD increases, the higher the Economic Growth. So if PAD (X1) increases by one unit while the other variables are fixed, it will result in an increase in the value of the Economic Growth variable by 0.005356 units.
3. The regression coefficient of the DAU (X2) of 0.000523 means that the DAU Variable (X2) shows that there is an influence on Economic Growth and has a positive pattern so that the more DAU increases, the higher the Economic Growth. So, if DAU (X2) grows by one unit and the other variables remain constant, it will result in an increase in the value of the Economic Growth variable by 0.000523 units.
4. The regression coefficient of DAK (X3) of -0.000858 means that the DAK Variable (X3) shows that there is an influence on Economic Growth and has a negative pattern so that the more

DAK increases, the lower the Economic Growth. So, a one-unit rise in DAK (X3), with other factors held steady, is linked to a -0.000858 unit drop in Economic Growth (Y).

5. The regression coefficient of Capital Expenditure (X4) of -0.005599 means that the Capital Expenditure Variable (X4) shows that there is an influence on Economic Growth and has a negative pattern so that the more Capital Expenditure increases, the lower the Economic Growth. So, if one-unit rise in Capital Expenditure (X4), with other factors held steady, is linked to a -0.005599 unit drop in Economic Growth (Y).

a. Coefficient of Determination

The results of data processing show that the determination coefficient is 0.277928 or 27.79%. This shows that the variation in the government's budget/expenditure for PAD (X1), DAU (X2), DAK (X3) and CE (X4) together has an influence of 27.79% on the variation in changes in Economic Growth in North Sulawesi Province. While the remaining portion is influenced by exogenous variables not included in this research framework.

b. Statistical Test F

The F test is used to assess whether all of the independent variables included in the model have a simultaneous or combined effect on the bound variables. The F-statistic value obtained from the data processing results is 0.962261 while the F-table is 3.48. The value of the F table is based on the magnitude of α 5% and df where the magnitude is determined by the numerator (k-1/5-1) = 4 and the df for the denominator (n-k/15-5) = 10. Thus, the F-statistic is smaller than the F-table indicating that the variables of PAD (X1), DAU (X2), DAK (X3) and CE (X4) together do not have a significant influence on Economic Growth or the Z variable.

c. Statistical Test t

Based on the results t in the multiple regression analysis table, it shows that there is a level of significance variables of PAD, DAU, DAK and CE on Economic Growth in North Sulawesi Province.

1) Hypothesis Testing 1 (H1) = There is a positive and significant influence of PAD on Economic Growth.

   Based on the results of statistical analysis on PAD variable, a probability of 0.6311 or significant at $\alpha = 0.05$ with a statistical value = 0.495224 so that a ttable value of 2.22814 was obtained. The absolute value of tstatistic < ttable (0.495224 < 2.22814), means that H1 is rejected. It shows that PAD is determined to be statistically insignificant in its relationship with Economic Growth.

2) Hypothesis Testing 2 (H2) = DAU exerts a statistically significant and positive influence on Economic Growth.

   Based on the results of statistical analysis on the DAU variable, a probability of 0.9800 or significant at $\alpha = 0.50$ with a statistical value = 0.025736, so that a ttable value of 0.69981 was obtained. The absolute value of tstatistical < ttable (0.025736 < 0.69981), means that H2 is rejected. It shows that the DAU variable has no effect and is not significant to Economic Growth.

3) Hypothesis Testing 3 (H3) = There is a positive and significant influence of DAK on Economic Growth.

    Based on the results of statistical analysis on the DAK variable, a probability of 0.7010 or significant at $\alpha = 0.50$ with a statistical value = 0.395202, so that a ttable value of 0.69981 was obtained. The absolute value of tstatistical < ttable (0.395202 < 0.69981), means that H3 is rejected. It shows that the DAK variable is partially insignificant to Economic Growth.

4) Hypothesis Testing 4 (H4) = A significant and positive relationship exists between Capital Expenditure and Economic Growth.

    Based on the results of statistical analysis on the Capital Expenditure variable, a probability of 0.2758 or significant at $\alpha = 0.50$ with a statistical value = 1.152703, so that a ttable value of 0.69981 was obtained. The absolute value of tstatistical > ttable (1.152703 > 0.69981), means that H4 is accepted. It shows that the Capital Expenditure Variable partially affects and significantly affects Economic Growth.

Table 2. Regression Results II

Dependent Variable: Y
Method: Least Squares
Date: 11/14/24 Time: 22:03
Sample: 2009 2023
Included observations: 15

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.432773	2.234619	2.431186	0.0379
X1	0.005979	0.000924	6.469932	0.0001
X2	-0.005464	0.001714	-3.188166	0.0110
X3	-0.000357	0.000185	-1.934723	0.0850
X4	-0.000852	0.000436	-1.952866	0.0826
With	0.012060	0.026692	0.451842	0.6621

R-squared	0.900864	Mean dependent var	3.572000
Adjusted R-squared	0.845788	S.D. dependent var	0.103316
S.E. of regression	0.040572	Akaike info criterion	-3.282292
Sum squared resid	0.014815	Black criterion	-2.999072
Log likelihood	30.61719	Hannan-Quinn criter.	-3.285309
F-statistic	16.35680	Durbin-Watson stat	1.770074
Prob(F-statistic)	0.000277		

Source: Eviews 8.0 Results

Regression equations formed from the results of eviews data processing

$$\mathbf{Y = 5.432773 + 0.005979\,X1 - 0.005464\,X2 - 0.000357X3 - 0.000852X4 + 0.012060Z + e2 \;....\; (2)}$$

An examination of Table 2, specifically the regression coefficients derived from the path analysis, reveals that:

1. The constant value of 5.432773 shows that if the variables of PAD (X1), DAU (X2) and DAK (X3), CE (X4) and Economic Growth (Z) have a value of 0 (zero), then the value of the regional financial independence level is 5.432773.
2. The regression coefficient of PAD (X1) of 0.005979 means that the PAD variable (X1) shows that there is an influence on the level of regional financial independence and has a positive pattern. So, if PAD (X1) increases by one unit and the other variables remain constant, the variable value of the regional financial independence level (Y) increases by 0.005979 units.
3. The regression coefficient of the DAU (X2) of - 0.005464 means that the DAU variable (X2) shows that there is a negative influence on the level of regional financial independence. So if DAU (X2) increases by one unit while the other variables are fixed, it will result in a decrease in the variable value of the regional financial independence level by - 0.005464 units.
4. The regression coefficient of DAK (X3) of **-** 0.000357 means that the DAK Variable (X3) shows that there is a negative influence on the level of regional financial independence. So if a unit increase in DAK (X3) is associated with a decrease of 0.000357 units in the level of regional financial independence (Y).
5. The regression coefficient of CE (X4) of **-** 0.000852 means that CE (X4) shows that there is a negative influence on the level of regional financial independence so if a unit increase in Capital Expenditure (X4) is associated with a decrease of 0.000852 units in the level of regional financial independence (Y).
6. The regression coefficient of Economic Growth (Z) of 0.012060 means that the Economic Growth Variable (Z) shows that there is an influence and a positive pattern on the level of regional financial independence. So, if a unit increase in economic growth (Z) is associated with an increase of 0.012060 units, the level of regional financial independence (Y) will be increased.

d. Coefficient of Determination

The result shows that the determination coefficient is 0.900864 or 90.09 %. This shows that the variation in the government's budget/expenditure for PAD (X1), DAU (X2), DAK (X3), CE (X4) and Economic Growth (Z) together influences the variation in the level of regional financial independence in North Sulawesi Province by 90.09%. The remaining portion is influenced by exogenous variables not included in this research framework.

e. Statistical Test F

The F test is utilized to determine whether all independent variables in the model collectively or simultaneously influence the dependent variable. Based on the data analysis results, the F-statistic value obtained is 16.35680, while the F-table value is 3.33. The F-table value is determined at a 5% significance level ($\alpha = 0.05$) with degrees of freedom calculated as follows: numerator df = (k-1 = 6-1) = 5 and denominator df = (n-k = 15-5) = 10. Since the F-statistic exceeds the F-table value, it indicates that the variables PAD (X1), DAU (X2), DAK (X3), CE (X4), and Economic Growth (Z) collectively have a significant effect on the level of regional financial independence (variable Y).

f. Statistical Test t

The findings of the multiple regression analysis table indicate a significant level of PAD, DAU, DAK, CE and Economic Growth to the level of regional financial independence in North Sulawesi Province.

1. Hypothesis Testing 5 (H5) = PAD has a significant and positive impact on the level of regional financial independence.

   Based on the results of statistical analysis on PAD variable, a probability of 0.0001 or significant at $\alpha = 0.05$ value with a statistical value = 6.469932, so that a table t-value of 2.26216 was obtained. The absolute value of tstatistical > ttable (6.469932 > 2.26216), means that H5 is accepted. It shows that PAD Variable partially affects and significantly affects the level of regional financial independence.
2. Hypothesis Testing 6 (H6) = DAU has a significant and positive impact on the level of regional financial independence.

   Based on the results of statistical analysis on DAU variable, a probability of 0.0110 or significant at $\alpha = 0.05$ with a statistical value = -3.188166, so that a ttable value of 2.26216 was obtained. The Absolute value of tstatistical < ttable (-3.188166 < 2.26216), means that H6 is rejected. It shows that DAU variable partially has a negative and insignificant effect on the level of regional financial independence.
3. Hypothesis Testing 7 (H7) = DAK has a significant and positive effect on the level of regional financial independence.

   Based on the results of statistical analysis on DAK variable, a probability of 0.0850 or significant at $\alpha = 0.05$ with a statistical value = -1.934723 so that a ttable value of 2.26216 was obtained. The absolute value of tstatistical ttable < ttable (-1.934723 < 2.26216), means that H7 is rejected. It shows that DAK Variable partially has a negative and insignificant effect on the level of regional financial independence.
4. Hypothesis Testing 8 (H8) = CE has a positive and significant impact on the level of regional financial independence.

   Based on the statistical analysis of the CE variable, a probability value of 0.0826 was obtained, which is significant at $\alpha = 0.05$ with a t-statistic value of -1.952866 and a t-table value of 2.26216. Since the absolute value of the t-statistic is less than the t-table value (-1.952866 < 2.26216), H8 is rejected. This indicates that the CE variable has a partial negative and insignificant effect on the level of regional financial independence.
5. Hypothesis Testing 9 (H9) = Economic Growth has a positive and significant impact on the level of regional financial independence.

   The result show taht the Economic Growth variable, a probability of 0.6621 or significant at $\alpha = 0.05$ with a t-statistical value = 0.451842 so that a t-table value of 2.26216 was obtained. The Absolute value of the t-statistic < the t-table (0.451842 < 2.26216), means that H9 is rejected. It shows that the Economic Growth Variable partially has a negative and insignificant effect on the level of regional financial independence.

Calculating Path Analysis Methods

a. Regional Original Income

Regional Original Income (X1) ➔ PE (Z) = 0.005356
Regional Original Revenue (X1) ➔ Financial Independence (Y) 0.005979
PE (Z) ➔ Financial Independence (Y) = 0.01260
Direct Effect (PL) , X1 Y = 0.005979
Indirect Influence Value (PTL), X1 Y = 0.005356 x 0.01260
= 0.0000675

Based on the calculations above, it is evident that the value of the indirect effect is smaller than the value of the direct effect (PTL 0.0000675 < PL 0.005979). Therefore, economic growth does not serve as an intervening (mediating) variable between Regional Original Revenue and Financial Independence in the Regional Government of North Sulawesi Province.

b. General Allocation Fund

General Allocation Fund (X2) ➔ PE (Z) = 0.000523
General Allocation Fund (X2) ➔ Financial Independence (Y) = 0.005464
PE (Z) ➔ Financial Independence (Y) = 0.01260
Direct Influence Value (PL) , X2 Y = 0.005464
Indirect Influence Value (PTL), X2 Y = 0.000523 x 0.01260
= 0.00000659

Based on the calculations above, it is observed that the value of the indirect effect is smaller than the direct effect (PTL = 0.00000659 < PL = 0.005464). This indicates that Economic Growth does not mediate the relationship between DAU and Financial Independence in the Regional Government of North Sulawesi Province.

c. Special Allocation Fund

Special Allocation Fund (X3) ➔ PE (Z) = 0.000858
Special Allocation Fund (X3) ➔ Financial Independence (Y) = 0.000357
PE (Z) ➔ Financial Independence (Y) = 0.01260
Direct Influence Value (PL) , X3 Y = 0.000357
Indirect Influence Value (PTL), X3 Y = 0.000858 x 0.01260
= 0.0000108

From the calculations above, it is evident that the indirect effect value is smaller than the direct effect value (PTL 0.0000108 < PL 0.000357). This indicates that Economic Growth does not mediate the relationship between DAK and Financial Independence in the Regional Government of North Sulawesi Province.

d. Capital Expenditure

Bleaching Modal (X4) ➔ PE (Z) = 0.00559
Capital Expenditure (x4) ➔ Financial Independence (Y) = 0.000852
PE (Z) ➔ Financial Independence (Y) = 0.01260
Direct Influence Value (PL) , X4 Y = 0.000852
Indirect Influence Value (PTL), X3 Y = 0.000559 x 0.01260
= 0.0000070434

The calculations above reveal that the indirect effect value is smaller than the direct effect value (PTL 0.0000070434 < PL 0.000852). This indicates that Economic Growth does not mediate the relationship between CE and Financial Independence in the Regional Government of North Sulawesi Province.

Classical Assumption Test

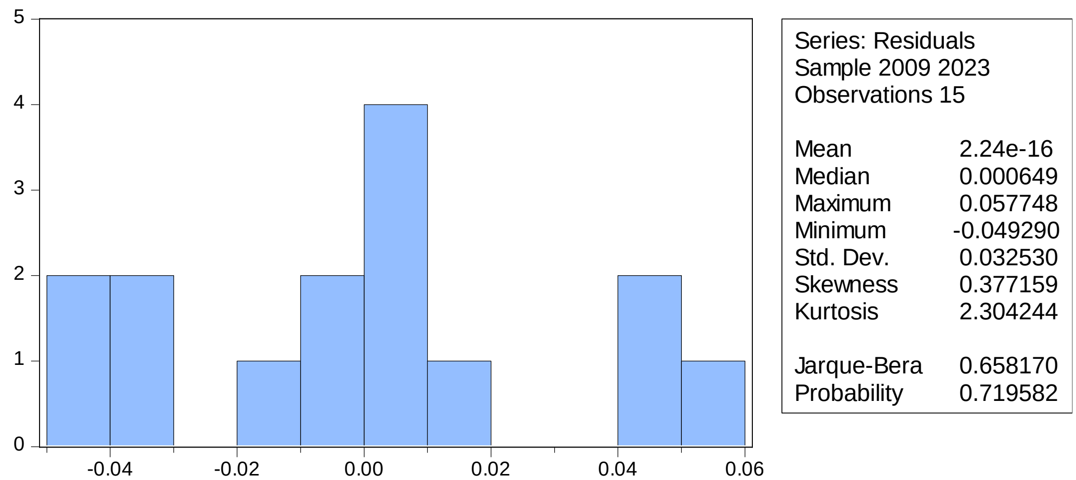

Figure 1. Normality Test Results

Source: Eviews 8.0 Results

The p-value from the J-B test is 0.7195, which is significantly greater than 0.05. This means that there is strong evidence to suggest that the data follows a normal distribution.

Table 3. Multicollinearity Test Results

Variance Inflation Factors
Date: 11/14/24 Time: 23:39
Sample: 2009 2023
Included observations: 15

Variable	Coefficient Variance	Uncentered BRIGHT	Centered BRIGHT
C	4.993521	45503.07	ON
X1	8.54E-07	58966.91	1.537878
X2	2.94E-06	204545.4	2.975429
X3	3.41E-08	2127.409	7.433061
X4	1.90E-07	12646.20	5.619762
With	0.000712	19.37554	1.384904

Source: Eviews 8.0 Results

Table 3 shows that all independent variables meet the multicollinearity criteria with tolerance values above 0.10 and VIF values below 10. This indicates no multicollinearity among the predictors in the regression model for financial independence.

Table 4. Heteroscedasticity Test Results

Heteroskedasticity Test: Glees

F-statistic	0.503792	Prob. F (5,9)	0.7670
Obs*R-squared	3.280192	Prob. Chi-Square (5)	0.6569
Scaled explained SS	2.238590	Prob. Chi-Square (5)	0.8152

Source: Eviews 8.0 Results

From the results of the Heteroscedasticity test using Eviews, it can be seen that the probability value of observation R2 is 0.6569 when compared to the risk of errors taken (used α = 5%), 0.6569 > 0.05, meaning that residual is classified as not having heteroscedasticity.

Table 5. Autocorrelation Test Results

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.254776	Prob. F(2,7)	0.7820
Obs*R-squared	1.017809	Prob. Chi-Square(2)	0.6012

Source: Eviews 8.0 Results

The results of autocorrelation with the level of financial independence as a Dependent Variable using the Breusch-Godfrey test or called the Lagrange Multiplier are known with a significance value of 0.6012. If the probability value of > α = 5% is free of the autocorrelation test., it means that 0.6012 > 0.05 means that the autocorrelation test is free

The Effect of Regional Original Income on Economic Growth

Statistical analysis of the Regional Original Revenue variable shows a probability value of 0.6311, which is not significant at α = 0.05, with a t-statistic value of 0.495224 compared to a t-table value of 2.22814. Since the absolute value of the t-statistic is less than the t-table (0.495224 < 2.22814), it indicates no significant relationship between Regional Original Revenue and Economic Growth.

The hypothesis testing results reveal that Regional Original Revenue does not positively affect economic growth in the North Sulawesi Provincial Government during the 2009–2023 period. These findings align with Gustiana's (2014) research, which also found that Regional Original Revenue has an insignificant impact on economic growth. However, this result contradicts the new growth theory, which posits that capital accumulation is a primary driver of economic growth. The discrepancy may be attributed to the nature of regional revenue, such as taxes, which can reduce consumption. As consumption decreases, revenue generation may decline, ultimately limiting economic growth.

The Effect of the General Allocation Fund on Economic Growth

The results of the second hypothesis test indicate that the General Allocation Fund (DAU) negatively impacts economic growth, implying that the size of the DAU does not contribute to economic growth. The DAU serves as a crucial source of regional income to meet expenditure needs and reflects the region's level of independence.

Regions receiving larger DAU allocations are often more reliant on the central government, indicating a lack of financial independence. Conversely, a smaller reliance on the DAU suggests greater regional autonomy. Allocated from the State Budget, the DAU aims to equalize financial capacity across regions to support decentralization. The central government, acting as the principal, allocates funds to local governments, including the DAU, to reduce disparities and ensure financial stability. Improved public services funded by the DAU are expected to enhance community welfare, emphasizing the need for development-focused allocation, including Capital Expenditure.

In this study, the DAU positively influences Capital Expenditure. This reflects the importance of DAU transfers in supporting regional governments, as their primary purpose is to stabilize regional finances and reduce disparities under the framework of decentralization. However, the findings reveal that the DAU negatively impacts economic growth, indicating that the second hypothesis is not supported.

The negative relationship between the DAU and economic growth suggests that the funds provided by the central government have not been effectively utilized to develop sectors capable of driving economic growth in North Sulawesi Province. This issue calls for greater attention from regional governments to optimize the use of the DAU for fostering real-sector development and improving economic performance.

The Effect of Special Allocation Funds on Economic Growth

The findings of this study demonstrate that the Special Allocation Fund (DAK) has a negative but insignificant effect on economic growth in the North Sulawesi Provincial Government. As one of the balance funds, the DAK is sourced from the State Budget and allocated to local governments to finance specific activities that align with regional needs and national priorities. Its primary purpose is to alleviate the financial burden of special activities that local governments would otherwise bear.

The DAK is intended to support investment activities related to the development, procurement, enhancement, and improvement of physical facilities and public service infrastructure with a long-term economic lifespan. This targeted utilization aims to enhance public services, which are reflected in capital expenditure. DAK funds are allocated to regions with specific needs to support government affairs requiring special attention. An increase in the DAK can also lead to higher capital expenditures, indicating a linkage between central government transfer funds and regional budget allocations, ultimately impacting economic growth.

However, the study's results indicate that the DAK does not significantly affect economic growth, meaning the third hypothesis is not supported. The utilization of DAK funds has not been fully optimized for investment activities in the development and improvement of public service facilities and infrastructure with long-term economic benefits. Redirecting DAK funds towards such activities could enhance public services and contribute to capital expenditure, thereby fostering economic growth.

The Effect of Capital Expenditure on Economic Growth

This study confirms that capital expenditure has a significant positive impact on economic growth. This finding aligns with Saragih's (2003) research, which states that when local governments allocate a larger budget for capital expenditures or development compared to routine expenditures, such budgetary policies can stimulate regional economic growth.

As a region with substantial potential for self-reliance, provinces formed through expansion often face challenges related to regional finances, particularly the heavy financial burden of driving development. The non-linear relationship between capital expenditure and economic growth may result from inefficiencies in the use of funds. Ineffective planning, inadequate evaluation of expenditures, or insufficient oversight can lead to expenditures that fail to significantly impact economic growth. Enhancing the effectiveness of capital expenditure requires active community involvement in decision-making and development processes. Without sufficient public participation and support, the development efforts may yield suboptimal results in terms of their contribution to economic growth.

The Effect of Regional Original Revenue on the Level of Regional Financial Independence

This study demonstrates that Regional Original Revenue significantly and positively influences the level of regional financial independence. These findings align with research conducted by Reza Marizka (2013) which highlights a positive relationship between regional original revenue and regional financial independence.

Based on data obtained by the author regarding the realization of regional revenue in North Sulawesi Province, it is evident that over the past 15 years, regional revenue has consistently increased on average each year. Concurrently, the demand for government programs has also grown annually, leading to higher regional expenditures.

However, the increase in regional original revenue has not been sufficient to fully cover the rising expenditures, necessitating external financial assistance to bridge the gap. This reliance on external support continues to influence the level of financial independence in North Sulawesi Province.

The Effect of General Allocation Funds (DAU) on the Level of Regional Financial Independence

The result show that DAU in North Sulawesi Province negatively affects the level of Regional Financial Independence. This means that any increase in DAU is significantly inversely proportional to the level of Regional Financial Independence.

The researcher (2020), attributes this to the inflexible utilization of the DAU, which is intended to equalize financial capacity among regions within the framework of decentralization. In practice, this rigidity limits regions from freely planning budget allocations for development activities aligned with their economic agendas, often leading to misaligned targets. This inability to effectively allocate the DAU can hinder the progress of regional economic development.

The results of this study corroborate the findings of Muliana (2009) who similarly observed a significant and negative impact of DAU on the level of regional financial independence within the context of regency and city governments across North Sumatra Province.

The Effect of Special Allocation Funds on the Level of Regional Financial Independence

The study results indicate that the DAK does not influence the level of regional financial independence in North Sulawesi Province. DAK, as part of the balance funds sourced from the State Budget, is allocated to finance special programs in specific regions aligned with national priorities. Its primary purpose is to support the fulfillment of basic community service facilities and infrastructure needs that have not reached established standards, thereby accelerating regional development.

These findings align with research conducted by Muliana (2009), which revealed that larger transfers of DAK from the central government correlate with lower levels of regional financial independence, whereas smaller DAK transfers are associated with higher levels of independence. This suggests that DAK may have a negative effect on regional financial independence. When regions receive significant DAK allocations from the central government, they tend to rely heavily on these funds, indicating a lack of financial autonomy.

DAK is specifically designated for regions to finance specialized activities within national priority programs that fall under regional responsibilities. It also aids in funding physical infrastructure and facilities across various sectors, including education, health, infrastructure, marine and fisheries, agriculture, local government infrastructure, and the environment.

The Effect of Capital Expenditure on the Level of Regional Financial Independence

The results of the second hypothesis test reveal that the Capital Expenditure variable has a negative and insignificant effect on the Level of Regional Financial Independence. In the context of regional autonomy, governments must enhance the quality of public services, ensuring that capital expenditures are directed toward facilities and infrastructure that directly benefit the community. Budget allocations should prioritize activities based on public needs to align with societal demands.

However, in practice, capital expenditures by local governments have not been utilized effectively or efficiently. This indicates that such spending has failed to achieve its intended public-interest goals, with limited beneficial outcomes. Furthermore, capital expenditures have not been sufficiently directed toward public-sector activities that could significantly contribute to regional revenue. Instead, they have often been allocated to consumptive or speculative activities. As a result, capital expenditures exhibit a negative impact on the financial independence of local governments.

These results differ from the study by Ariani & Putri (2010) which examined the impact of CE and DAU on regional financial independence and tax effort (a case study on Regency/City Governments in the Former Surakarta Region) and found that capital expenditures have a positive effect on regional financial independence levels.

The Effect of Economic Growth on the Level of Regional Financial Independence

The test results for the second hypothesis indicate that the Economic Growth variable has a negative and insignificant effect on the Level of Regional Financial Independence. These findings align with Tahar and Zakhiya (2017) which concluded that PAD and DAU, supported by regional independence, do not significantly impact economic growth. This may be attributed to the government's inability to fully optimize local potential, such as through streamlining investment processes.

The findings of this study align with established theories in public finance and fiscal decentralization. PAD was found to have a significant positive effect on economic growth and financial independence, confirming previous research by Marizka (2013), which highlighted that PAD improves fiscal autonomy through increased local resource utilization. This relationship supports the new growth theory, emphasizing that regions with strong revenue bases can finance development independently, reducing reliance on central transfers.

However, DAU exhibited a negative effect on economic growth, a finding consistent with Muliana (2009), who suggested that DAU transfers might induce fiscal dependency rather than encouraging economic innovation. This dependency arises from the rigid allocation framework of DAU, limiting regions' discretion in using funds for local economic development priorities.

The Special Allocation Fund (DAK) was found to have no significant impact on economic growth, reflecting the findings of Gustiana (2014), who argued that DAK allocations are often misaligned with local development needs. Inefficiencies in the utilization of DAK funds, particularly in infrastructure projects, further reduce its potential to stimulate regional economies.

The positive impact of capital expenditure on economic growth, as found in this study, aligns with Saragih's (2003) assertion that increased development budgets contribute to economic progress . However, as Ariani and Putri (2010) highlighted, ineffective planning and speculative capital expenditure can diminish its intended economic benefits. This study underscores the necessity for local governments to enhance budget management and prioritize capital projects that generate long-term returns.

Economic growth's limited effect on financial independence aligns with the argument made by Tahar and Zakhiya (2017), who found that even when local revenues increase, weak governance and inefficient fiscal management can undermine progress. This suggests that boosting economic growth alone is insufficient; institutional reforms are also critical to achieving fiscal autonomy. Overall, the study reinforces the argument that financial decentralization requires a multi-faceted approach, balancing revenue enhancement, efficient fund allocation, and strategic capital investment. Future research could explore the effects of non-fiscal variables such as governance quality and political stability on regional financial independence.

Conclusion

The study findings reveal that Capital Expenditure significantly and positively impacts economic growth, whereas Regional Original Revenue (PAD), the General Allocation Fund (DAU), and the Special Allocation Fund (DAK) do not affect economic growth. PAD is also found to have a significant positive effect on regional financial independence, while DAU, DAK, and Capital

Expenditure do not influence regional financial independence. Additionally, economic growth negatively affects regional financial independence, although the relationship is not significant. Based on these results, it is recommended that the North Sulawesi Provincial Government prioritize capital expenditure over employee and goods/services expenditure. Future research should consider incorporating a broader range of independent variables and extending the study period to produce more comprehensive and relevant findings.

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