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THE IMPACT OF LOCAL TAX REVENUE ON SOCIETY WELFARE

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Abstract
Regional taxes are one of the pillars of state revenue. Regional taxes have a strategic position both for financing development in the regions and regulating community life in the regions. This study aims to investigate the effect of regional tax revenues on public welfare in Indonesia. This study uses a quantitative method with secondary data obtained from the Central Statistics Agency for the period 2019 - 2021. The power taken includes regional tax variables, education level, number of poor people, and availability of basic health facilities. The test results show the following findings. First, regional tax revenues have the potential to encourage socio-economic development but the impact is highly dependent on the effectiveness of budget allocation and management. Second, regional tax revenues have not had a significant impact on reducing the number of poor people. However, these results emphasize the importance of an integrated approach. Third, the development of basic health facilities depends more on the Special Allocation Fund than regional tax revenues.
Keywords: Basic healty facilities, Level of education, Local tax, Poverty

INTRODUCTION

Regional taxes play an important role as one of the main sources of local government revenue in Indonesia. Revenue obtained through various types of taxes, such as motor vehicle tax, land and building tax, and hotel and restaurant tax, is used to finance development programs aimed at improving community welfare (Bahl & Wallace, 2007). With regional autonomy, the government has greater authority in managing regional taxes to support sustainable development (Bird, 2013). This role is strengthened through Law Number 1 of 2022 concerning Financial Relations between the Central Government and Regional Governments, which regulates the procedures for collecting, managing, and using regional taxes. This law provides a stronger legal basis for regions in optimizing tax revenues and ensuring that these revenues are used effectively to improve community welfare.

Public welfare is the main objective of every public policy, including taxation policy at the regional level (Bird, 2013). Welfare is measured through various indicators, such as education level, health, and income (Widyastuti, 2012). In Indonesia, there is a significant disparity in welfare between regions, which is largely influenced by the ability of local governments to manage their fiscal resources, including regional taxes (Honggara & Jamaluddin, 2024). Regions that are able to optimize revenue from regional taxes tend to have better public facilities, which contribute to improving the quality of life of their citizens.

The level of education is one of the main indicators of people's welfare, which plays an important role in reducing poverty and increasing economic productivity (Siregar & Ritonga, 2018). Quality education enables people to improve their quality of life and contribute to economic development. However, the disparity in access to education between rich and poor areas in Indonesia remains a challenge. Studies show that areas with higher local tax revenues are able to provide better education facilities, as reflected in the high rate of school completion up to high school level in these areas (Faturani & Dona, 2023).

In addition, the number of poor people is also another important indicator of people's welfare. Poverty in Indonesia, although decreasing in recent decades, is still a serious problem that needs to be addressed (Muslihatinningsih & Abidin, 2022). Local governments have a crucial role in poverty alleviation through the allocation of funds obtained from local taxes. The

taxes collected should be used for programs that directly reduce poverty, such as health services, education, and social assistance. However, the effectiveness of the use of local taxes in reducing poverty is still a matter of debate and requires further study.

Basic health facilities are also a crucial aspect of people's welfare. The availability and quality of health facilities are greatly influenced by the fiscal capacity of local governments (Alfonso & Gani, 2024). Regions with adequate tax revenues can provide better health services, which contribute to improved public health, reduced maternal and child mortality rates, and increased life expectancy. Research by Martira and Nursadi (2020) shows that investment in health facilities funded by local taxes has a positive impact on public health, especially in areas with limited access. The 2019-2021 period is an important period to analyze due to the various economic and health challenges faced by Indonesia, especially the impact of the COVID-19 pandemic. The pandemic has put great pressure on local health systems and economies, and has affected the ability of local governments to collect tax revenues (Kusno, 2020). Analyzing data from this period provides in-depth insights into the role of local taxes in supporting people's welfare during times of crisis and how effective local governments are in allocating resources. which is limited to maintaining and improving people's welfare.

Although regional taxes have great potential to support people's welfare, there are several problems that arise related to the optimization of their collection and allocation in Indonesia. One of the main problems is the significant gap in tax revenues between regions (Yulianto, 2021). Regions with a strong economic base and large populations, such as Jakarta or Surabaya, tend to have much higher tax revenues compared to more remote or less developed regions. This causes inequality in the ability of regions to provide quality public services, which ultimately has an impact on people's welfare. Difficulties in increasing tax revenues in less developed regions are often caused by a weak economic base, dependence on sectors that not taxed effectively, as well as low levels of tax compliance among taxpayers (Hidayat et al., 2021; Trisnayani, 2024).

In addition, the issue of regional tax management and allocation is also in the spotlight. There are regions that, although they have succeeded in collecting significant amounts of taxes, have failed to allocate these funds effectively for programs that truly improve people's welfare. For example, there are reports showing that most tax funds are used for routine expenses such as employee salaries, while allocations for investment in the education, health, and infrastructure sectors that can improve people's quality of life are very limited (Wibowo & Karo, 2021). This shows that regional financial management, including planning and monitoring of budget allocations, needs to be improved to ensure that tax revenues are used optimally for people's welfare.

Another problem is the impact of the COVID-19 pandemic which has worsened the fiscal situation in many regions. The pandemic has reduced the ability of regions to collect taxes due to the economic slowdown, business closures, and a general decline in economic activity. At the same time, the need for public services, especially in the health sector, has increased drastically. This has put great pressure on regional budgets, forcing regional governments to seek additional funding sources or cut budgets in other sectors that are important for the welfare of the community (Venni et al., 2023). This problem highlights the need for a more flexible and responsive fiscal policy, as well as support from the central government to help regions that are most severely affected by the pandemic.

Several studies have been conducted to examine the impact of local taxes on public welfare in various countries, including Indonesia. Obeng-Odoom (2011) in their study showed that fiscal decentralization, including local tax management, can contribute positively to public welfare if accompanied by increased capacity of local governments in managing the revenue.

They found that regions that are able to manage tax revenues well tend to have lower poverty rates and better access to public services such as education and health.
Research by Ananda (2018) in Indonesia highlights the challenges in managing regional taxes, especially in regions with a weak economic base. This study shows that although there has been an increase in regional tax revenues, the benefits of these revenues are not always evenly distributed across regions. More developed regions tend to use tax revenues to strengthen infrastructure and public services, while less developed areas often use these funds for routine needs, with minimal impact on community welfare.

In addition, research by Rheswari and Akbar (2022) examined the impact of the COVID-19 pandemic on the ability of local governments to collect and allocate taxes. They found that the pandemic has exacerbated fiscal disparities between regions, with already economically weak regions increasingly struggling to maintain their budget balances. The study also suggests the need for support from the central government in the form of targeted fiscal assistance to help the most affected regions.

Overall, previous studies have shown that although local taxes have great potential to support public welfare, there are significant challenges in optimizing the collection, management, and allocation of these taxes. This study seeks to fill the gap in the literature by further exploring the relationship between local taxes and public welfare, particularly in the context of Indonesia during the period 2019-2021, which was influenced by additional challenges due to the COVID-19 pandemic.

This study aims to comprehensively analyze the impact of regional taxes on people's welfare in Indonesia, focusing on 34 provinces during the period 2019-2021. The main objective of this study is to evaluate the extent to which regional taxes contribute to improving people's welfare, as measured by important indicators such as education level, number of poor people, and availability of basic health facilities. This study also aims to identify factors that hinder the optimization of regional tax management and how these factors affect the distribution of welfare between regions. In addition, this study examines the impact of the COVID-19 pandemic on the fiscal capacity of local governments and how this affects the effectiveness of the use of regional taxes for public welfare. Thus, this study is expected to provide evidence-based recommendations for improving regional fiscal policies, so that they can support efforts to improve public welfare more evenly and sustainably throughout Indonesia.

LITERATURE REVIEW

Social Welfare Theory is the main foundation in understanding the role of local taxes in improving public welfare. This theory emphasizes that fiscal policy, including tax management, must be directed at efficient resource allocation and fair distribution to maximize social welfare. In the context of regional autonomy, this theory supports fiscal decentralization, where local governments have greater authority to manage their own taxes and budgets, so that they can be more responsive to local needs. Local taxes, according to this theory, not only function as a source of income, but also as a tool to reduce economic inequality through the redistribution of income between regions (Musgrave & Musgrave, 1980; Oates, 2004).

This theory also emphasizes the importance of efficiency in tax collection, namely collecting taxes without causing significant economic distortion. This efficiency is important so that taxes do not hinder regional economic growth, but support it. In this case, regional taxes must be designed with a balance between revenue needs and maintaining a conducive investment climate. In addition, social welfare theory encourages the use of regional taxes as an instrument to equalize income distribution and fund essential public services, so that it can improve the quality of life and welfare of society more evenly (Atkinson & Stiglitz, 2015; Diamond & Mirrlees, 1971).

Regional taxes, as regulated in Law Number 1 of 2022 concerning Financial Relations between the Central Government and Regional Governments (UUHKPD), are one of the main sources of income managed directly by regional governments to fund the implementation of government duties at the local level. Regional taxes include various types of levies including Motor Vehicle Tax, Rural and Urban Land and Building Tax (PBB-P2), Hotel Tax, Restaurant Tax, and several other types of taxes that are relevant to the economic conditions and potential of the region. Through this tax, regional governments are expected to be able to increase their fiscal capacity independently, so as to reduce dependence on transfer funds from the central government and more empowered in meeting regional development needs (Ekarin, 2024).

Good regional tax management has great potential to support sustainable development and improve community welfare. According to UUHKPD, regional taxes not only function as an instrument for collecting revenue, but also as a tool to encourage community participation in financing regional development and increase accountability and transparency in regional financial management. Furthermore, UUHKPD emphasizes that tax policies at the regional level must be formulated in such a way that they can stimulate local economic growth without burdening the community and the business world. Regional taxes, thus, play a dual role in strengthening regional finances as well as a policy instrument that can encourage economic and social development at the local level (Kurniawan et al., 2024).

Community welfare, in the context of this study, is measured through three main variables: education level, number of poor people, and availability of basic health facilities. Education level reflects the community's ability to access and complete education up to high school level, which plays an important role in improving the quality of life and economic productivity (Suryadarma & Suryahadi, 2010). The number of poor people provides an overview of the extent to which the community is able to meet their basic needs, with high poverty rates indicating economic inequality and limited access to economic opportunities (Ravallion, 2015). Meanwhile, the availability of basic health facilities reflects the community's access to essential health services, which directly affect the quality of life, life expectancy, and ability to deal with health crises (Maeda et al., 2014; Pritchett & Summers, 1993). By integrating these three variables, community welfare can be measured more comprehensively, covering aspects of education, economy, and health that interact to determine the quality of life of a population.

The hypotheses developed based on demographic variables, independent variables, and dependent variables are as follows:

H1: Regional taxes have a positive effect on education levels.

Several studies have shown that regional taxes contribute significantly to improving welfare through the allocation of funds for education. For example, research by Fatimah et al. (2020) and Rahayu et al. (2020) revealed that optimal regional taxes can increase the Human Development Index (HDI) through the education sector. Thus, increasing regional taxes is expected to contribute positively to the level of education in these regions.

H2: Regional taxes have a negative effect on the number of poor people.

Effectively managed local taxes can support poverty alleviation programs, as found in research by Matitaputty et al. (2020), which shows that local taxes can reduce the number of poor people. The use of taxes to fund social welfare programs and infrastructure development can provide direct benefits to the poor, thus potentially reducing poverty rates.

H3: Regional taxes have a positive effect on basic health facilities.

The results of research by Husein (2021) and Suoth et al. (2022) show that increasing regional taxes contributes to the development of health facilities. Regional taxes that are well managed can be used to fund health facilities, thus having a positive impact on the availability and quality of basic health services which are very important for community welfare.

METHODS

The research design used in this study is a quantitative design with a linear regression analysis approach. The quantitative approach was chosen because this study aims to measure and analyze the relationship between independent variables (local taxes) and dependent variables (level of education, number of poor people, and basic health facilities). Quantitative design allows researchers to obtain objectively measurable data and apply statistical analysis to see the effect of independent variables on dependent variables (Creswell & Creswell, 2017). Linear regression analysis is used because it can show the strength and direction of the relationship between local taxes and community welfare as measured by the three variables.

The linear regression approach in this study was applied to panel data obtained from 34 provinces in Indonesia during the period 2019 to 2021. Panel data, which is a combination of cross-sectional data and time series data, was chosen because it is able to provide more comprehensive information and take into account variations between provinces and changes over time (Baltagi, 2008). By using panel data, this analysis allows researchers to not only see the relationship between variables at a certain time, but also understand changes in trends and influences that occur in each province throughout the time studied. The use of linear regression in panel data also allows for better control of the problem of heterogeneity between provinces.

regression is used to model the effect of local taxes on public welfare through education, poverty, and health variables. The linear regression model can be used to see whether local taxes have a significant effect on increasing education levels, reducing the number of poor people, and increasing the availability of basic health facilities. This study applies classical assumption tests such as multicollinearity, heteroscedasticity, and autocorrelation tests to ensure the validity and reliability of the regression model used (Gujarati, 2009). This analysis is expected to provide accurate results in evaluating the contribution of local taxes to public welfare in Indonesia.

The sample in this study consists of 34 provinces in Indonesia, which were selected comprehensively to represent the diversity of social, economic, and demographic conditions throughout Indonesia. By selecting all provinces, this study can provide a more comprehensive picture of the influence of regional taxes on public welfare at the national level. The selection of 34 provinces includes regions with varying levels of economic development, infrastructure availability, and different fiscal policies, so that the analysis carried out is expected to reflect a broader and more diverse reality throughout Indonesia (Quantitative, 2016). The number of samples involving all provinces also allows this study to have a larger coverage and higher accuracy of results.

The data used in this study are secondary data obtained from the Central Statistics Agency (BPS) for the period 2019 to 2021. The data taken include regional tax variables, education level (measured from the level of school completion to high school), the number of poor people, and the availability of basic health facilities. Data collection was carried out by directly accessing the official BPS website, which provides data related to these variables. BPS data was chosen because it is a credible data source and is widely used in various academic studies and public policy making in Indonesia (Kuncoro, 2013). BPS periodically publishes data related to the economy, education, health, and other social indicators, which are very relevant to the objectives of this study.

The independent variable in this study is local taxes, which are one of the main sources of income for local governments. Local taxes include various types of taxes collected by the provincial government, such as motor vehicle tax, land and building tax, and hotel and restaurant tax. Local taxes serve as an important instrument to fund development and the provision of public services in the regions (Bird, 2013). In this study, local taxes are measured based on the total local tax revenue recorded in the provincial government financial report,

provided by the Central Statistics Agency (BPS) for the period 2019-2021. The value of this local tax is calculated in billions of rupiah and analyzed to see its effect on various indicators of community welfare.

The first dependent variable is the level of education, which is measured by the level of school completion up to the senior high school level. The level of education is one of the main indicators of community welfare, because higher education is generally associated with better income and wider economic opportunities (Hanushek & Woessmann, 2010). Data on the level of school completion in each province are taken from the education statistics report published by BPS. The level of education is measured as the percentage of the population who have completed education up to the senior high school level from the total population of senior high school age in each province. The higher the percentage of education completion, the better the level of education in the area.

The second dependent variable is the number of poor people, which is a major indicator of the economic welfare of the community. Poor people are defined as individuals or households whose income is below the poverty line set by BPS. Data on the number of poor people are obtained from the BPS annual report, which records the percentage of poor people in each province. This percentage is used as a standard measure to evaluate the level of poverty in each region (Ravallion, 2015). This variable is used to see whether increasing local taxes has an impact on reducing the number of poor people, assuming that tax revenues can be allocated to poverty alleviation programs.

The third dependent variable is basic health facilities, which is measured by the number of health facilities per 10,000 population in each province. Basic health facilities include health centers, clinics, and hospitals that provide basic health services to the community. The availability of health facilities is an important indicator of welfare because it is directly related to the community's access to adequate health services (Pritchett & Summers, 1993). Data on health facilities is taken from the BPS report on public health, and this variable is measured as the number of health facilities available per 10,000 population in each province. The higher this number, the better the community's access to basic health services.

RESULTS AND DISCUSSION

Linear regression analysis is used to test previously formulated hypotheses, with the results of testing each hypothesis explained in detail as follows .

The Influence of Regional Tax Revenue on Education Level

The regression results with the Random Effect model show that the Regional Tax Revenue variable has a coefficient of 2.80e-10 on the level of education (High School Education), which is measured by the level of school completion up to SLTA. The z value = 1.37 with p-value = 0.170 indicates that this relationship is not significant at the 5% confidence level. This means that statistically, there is no strong enough evidence to conclude that local tax revenue has a direct effect on the level of education in provinces in Indonesia during this study period. However, the direction of the positive relationship indicates that increasing local taxes has the potential to increase the level of education.

The interpretation of the coefficient value of 2.80e-10 indicates that every increase of one unit of local tax has the potential to increase the completion rate of high school education, although this effect is not statistically significant. The confidence interval range of the coefficient (-1.20e-10 to 6.81e-10) also includes zero, which strengthens the result that This relationship is not significant. The rho value = 0.8507, or 85.07%, indicates that most of the variance in the data comes from differences between provinces, not over time, which emphasizes the importance of considering provincial characteristics in this analysis.

The Influence of Regional Tax Revenue on the Number of Poor People

The regression results with the Fixed Effect model show that the Regional Tax Revenue variable has a coefficient of 6.36e-09 on the number of poor people. The t value = 0.70 with p-value = 0.486 indicates that this relationship is not significant at the 5% confidence level. This means that statistically, there is not enough evidence to conclude that regional tax revenue directly affects the number of poor people in 34 provinces in Indonesia during this study period. The coefficient confidence interval (-1.18e-08 to 2.45e-08) includes zero, which strengthens the result that this relationship is not significant. However, the direction of the positive relationship indicates that increasing regional tax revenue can have the potential to reduce poverty levels if used effectively.

The interpretation of the coefficient value of 6.36e-09 indicates that every one unit increase in local tax revenue will be followed by a small reduction in the number of poor people, although this effect is not significant. The rho variable = 0.9929, or 99.29%, indicates that most of the variation in the data comes from differences between provinces, not from time to time. This indicates that differences in characteristics between provinces, such as economic structure and social policies, play an important role in influencing the relationship between local taxes and poverty levels.

The Influence of Regional Tax Revenue on Basic Health Facilities

The regression results with the Random Effect model show that the Regional Tax Revenue variable has a coefficient of 3.61e-11 on the availability of basic health facilities per 10,000 residents. The z value = 0.22 with p-value = 0.828 indicates that this relationship is not significant at the 5% confidence level. In other words, there is no statistical evidence strong enough to conclude that regional tax revenue directly affects the availability of basic health facilities in 34 provinces in Indonesia. The coefficient confidence interval (-2.90e-10 to 3.62e-10) includes zero, which strengthens the conclusion that this effect is not significant. However, the direction of the positive relationship indicates the potential for regional taxes to support the development of health facilities if utilized effectively.

Interpretation of the coefficient value of 3.61e-11 shows that every increase of one unit of regional tax revenue only has a small impact on increasing availability of basic health facilities. The rho value = 0.9484, or 94.84%, indicates that most of the variation in the data comes from differences between provinces rather than differences in time. This confirms that differences in characteristics between provinces, such as health policy priorities, budget allocations, and existing health infrastructure, play a significant role in influencing this outcome.

The Influence of Regional Tax Revenue on Education Level

Theoretically, local tax revenues have a strategic role in improving the quality of education through the allocation of funds for school construction, teacher training, and scholarship programs. Previous research by Hanushek and Woessmann (2011) emphasized that adequate investment in education has a significant impact on improving the quality of the workforce and long-term economic growth. However, the results of this study indicate that the relationship between local taxes and education may be influenced by other factors, such as the education budget allocation policy in each province. These results also indicate that the increase in local tax revenues has not been directly translated into improvements in education. Other factors, such as efficiency in local budget management, local government policy priorities, and distribution of educational infrastructure, may play a greater role.

Research by SETIAWAN (2017) examines the influence of General Allocation Fund (DAU), Special Allocation Fund (DAK), Revenue Sharing Fund (DBH), and Local Original Income (PAD) on Regional Expenditure in the Education Sector in 29 Regencies/Cities in East Java in 2013-2015. The results of the analysis show that simultaneously all independent

variables have an effect on education expenditure. However, partially, only DAU and DBH have a significant effect, while PAD has no effect on education expenditure. This shows that the contribution of PAD to education expenditure is still limited compared to other sources of funds. PAD is mainly generated from regional taxes, and the education budget has an effect on education facilities. So that tax revenue has an indirect effect on the level of education. Thus, it can be said that regional tax revenue does not affect the level of education.

Overall, these results indicate that although local taxes have great potential to support education, their effectiveness is highly dependent on budget allocation and management. This study suggests that local governments need to improve the efficiency of tax revenue management for the education sector. In addition, Additional research is needed to explore other factors that may influence the relationship between local taxes and education, such as the level of local autonomy or national education policy.

The Influence of Regional Tax Revenue on the Number of Poor People

Theoretically, regional tax revenue has great potential to support poverty alleviation programs through the allocation of funds to sectors that improve community welfare. Research by Ravallion (2015) shows that well-managed regional revenue can be used to fund welfare programs, provide access to education and health, and create jobs that can ultimately reduce poverty. However, the results of this study indicate that the effectiveness of regional taxes in reducing the number of poor people in Indonesia is not optimal, which may be due to inefficiency in budget allocation or unfocused policy priorities.

Other factors that influence the relationship between local tax revenue and the number of poor people are the level of education and per capita income. Research by Indrajaya and Iswara (2014) in Bali Province shows that the level of education has a negative and significant effect on the poverty rate, meaning that increasing community education can directly reduce poverty. On the other hand, local original income and per capita income partially do not have a significant effect on the poverty rate, indicating that the impact of local income depends on the effectiveness of its allocation. In the context of this study, the regression results showing an insignificant relationship between local taxes and the number of poor people can be explained by the possibility of suboptimal tax allocation to support sectors that have a direct impact on poverty reduction, such as education and health.

The results of this study support the findings of Indrajaya and Iswara (2014) that poverty reduction requires an integrated approach involving improving education, creating jobs, and optimizing regional income management. Regional tax revenues can be an important instrument in reducing poverty if they are allocated effectively to strategic sectors. Therefore, a more focused and targeted tax allocation policy is needed to ensure that the revenue has a significant impact on reducing the number of poor people, as proven in Bali that education plays a major role in poverty alleviation efforts.

Overall, these results suggest that while local tax revenues have the potential to reduce poverty, their effectiveness depends on how the funds are used. More targeted and efficient policies are needed to ensure that local taxes truly have a significant impact on poverty reduction. This study provides important insights for local governments to improve tax revenue management so that they can be more effective in supporting poverty alleviation programs throughout Indonesia.

The Influence of Regional Tax Revenue on Basic Health Facilities

Research by Tradinatama and Solikin (2023) revealed that the Special Allocation Fund (DAK) in the health sector is often used to build and improve health service infrastructure, such as health centers and hospitals. Although this development has succeeded in improving the quality of public health services, financing for this infrastructure often does not come from regional tax revenues, but from DAK. On the other hand, this effort also creates additional

burdens for the regional government budget, such as the cost of recruiting health workers, paying salaries, and training and developing employee capacity. This burden limits the fiscal space of regional governments to allocate funds to other potentially more productive sectors, so that even though the health sector has increased, its impact on overall regional retribution revenues remains limited. This finding supports the results of our study, where regional tax revenues have not shown a significant influence on the development of basic health facilities, because most health facilities are built through DAK, not from regional tax revenues, and there are limitations in budget allocation due to the additional burdens that accompany this development.

The results of the study by Fadmawati et al. (2018) showed that Village Original Income (PADesa), Village Funds (DD), Village Fund Allocation (ADD), and the number of health facilities did not have a significant effect on the allocation of village spending in the health sector in 2017. This indicates that although there are adequate sources of income, these factors have not directly influenced spending intended for the development of the health sector. This finding supports the results of our study, where local tax revenues did not show a significant effect on the availability of basic health facilities. These results underline that the relationship between income and health sector development is highly dependent on the budget allocation policies implemented. Thus, both at the village and provincial levels, the effectiveness of income in increasing access to basic health requires more targeted and efficient planning in resource management.

Overall, these results suggest that local tax revenue has the potential to support the development of basic health facilities, but its impact is not statistically significant in this study. More focused and efficient policies are needed to ensure that tax revenue is actually used to improve access and quality of health facilities. This study provides insight that improving managerial capacity and fiscal management can be an important step to optimize the impact of local taxes on the health sector in Indonesia.

Practical and Theoretical Implications

Practical Implications

The results of this study provide important guidance for local governments in managing tax revenues to achieve development goals, especially in the education, health, and poverty alleviation sectors. In practice, local governments need to improve the efficiency of tax revenue budget allocation, ensuring that funds are optimally allocated to strategic sectors such as education and health. This effort can be done through more targeted budget planning, strict supervision, and prioritization of programs that have a direct impact on improving the quality of life of the community. In addition, the results of this study show the importance of integration between tax revenues and transfer funds, such as the Special Allocation Fund (DAK), to maximize the impact of development, especially in regions with limited fiscal resources.

Theoretical Implications

Theoretically, this study strengthens the literature on the relationship between local tax revenue and socio-economic development by revealing the limited direct impact of local taxes on education, poverty alleviation, and health facilities. The finding that local tax revenue is often insignificant in supporting these strategic sectors provides a new perspective on the efficiency of local budget allocation. This study also emphasizes the importance of analyzing contextual factors, such as fiscal policy, managerial efficiency, and regional characteristics, in evaluating the impact of tax revenue. Further research can deepen this analysis by considering the interaction between local tax revenue and fiscal transfer programs to understand their impacts more holistically.

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CONCLUSION

This study shows that regional tax revenue has strategic potential to support socio-economic development, but its impact is highly dependent on the effectiveness of budget allocation and management. In the context of education level, the results show that regional tax revenue does not have a significant influence, indicating that tax contributions to education still require more targeted policy support. This is in line with previous findings stating that the General Allocation Fund (DAU) and Revenue Sharing Fund (DBH) are more dominant than Regional Original Income (PAD) in supporting education spending at the regional level.

In terms of poverty alleviation, the results of the study indicate that regional tax revenues have not had a significant impact on reducing the number of poor people. However, these results emphasize the importance of an integrated approach, such as increasing access to education and creating jobs, to support poverty reduction. Regional tax revenues can be a more effective instrument if allocated strategically to sectors that have a direct impact on community welfare, taking into account efficiency and allocation priorities.

For the health sector, this study shows that the development of basic health facilities relies more on the Special Allocation Fund (DAK) than on regional tax revenues. This indicates that the role of regional taxes in the health sector is still limited, especially in regions that rely on fiscal transfers for health infrastructure development. Overall, this study highlights the need for more efficient and targeted fiscal policies, as well as strengthening the managerial capacity of regional governments, to ensure that regional tax revenues are truly used optimally in supporting development and improving community welfare.

Suggestion

This research has a very limited scope. The future research could focus on factors influencing the effectiveness of regional tax utilization, such as budget transparency, managerial capacity of local governments, and public oversight. Evaluate the role of information technology in improving the efficiency of regional tax management. Also, future research conduct comparative studies between regions with high performance in managing regional taxes and those with lower effectiveness. Analysis can include social, economic, and institutional factors that support regional tax optimization.

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Attachment

. regress PendidikanSMA PendapatanPajakProvinsi

Source	SS	df	MS		
Model	992.574389	1	992.574389	Number of obs	= 102
Residual	10800.5079	100	108.005079	F(1, 100)	= 9.19
Total	11793.0823	101	116.763191	Prob > F	= 0.0031
				R-squared	= 0.0842
				Adj R-squared	= 0.0750
				Root MSE	= 10.393

PendidikanSMA	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
PendapatanPajakProvinsi	4.21e-10	1.39e-10	3.03	0.003	1.46e-10	6.97e-10
_cons	61.32378	1.176766	52.11	0.000	58.98911	63.65845

. xtreg PendidikanSMA PendapatanPajakProvinsi, fe

Fixed-effects (within) regression — Number of obs = 102
Group variable: Provinsi — Number of groups = 34

R-squared:
Within = 0.0031
Between = 0.0962
Overall = 0.0842

Obs per group:
min = 3
avg = 3.0
max = 3

F(1,67) = 0.21
corr(u_i, Xb) = -0.4193 — Prob > F = 0.6512

PendidikanSMA	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
PendapatanPajakProvinsi	-1.86e-10	4.11e-10	-0.45	0.651	-1.01e-09	6.33e-10
_cons	63.82015	1.73391	36.81	0.000	60.35926	67.28105
sigma_u	10.894028					
sigma_e	4.0821008					
rho	.87687949	(fraction of variance due to u_i)				

F test that all u_i=0: F(33, 67) = 17.61 — Prob > F = 0.0000

. *Nilai F test Prob = 0.00 menunjukkan hasil signifikan. Artinya Fiixed Effect lebih baik dibandingkan Common ef

. estimates store fixed

. xtreg PendidikanSMA PendapatanPajakProvinsi, re

Random-effects GLS regression — Number of obs = 102
Group variable: Provinsi — Number of groups = 34

R-squared:
Within = 0.0031
Between = 0.0962
Overall = 0.0842

Obs per group:
min = 3
avg = 3.0
max = 3

Wald chi2(0) = .
corr(u_i, X) = 0 (assumed) — Prob > chi2 = .

PendidikanSMA	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
PendapatanPajakProvinsi	2.80e-10	2.04e-10	1.37	0.170	-1.20e-10	6.81e-10
_cons	61.90322	1.918366	32.27	0.000	58.14329	65.66315
sigma_u	9.7433917					
sigma_e	4.0821008					
rho	.85068135	(fraction of variance due to u_i)				

. estimates store random

. hausman fixed random

	Coefficients (b) fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) Std. err.
Pe~kProvinsi	-1.86e-10	2.80e-10	-4.67e-10	3.56e-10

b = Consistent under H0 and Ha; obtained from xtreg. B = Inconsistent under Ha, efficient under H0; obtained from xtreg.

Test of H0: Difference in coefficients not systematic chi2(1) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 1.72
Prob > chi2 = 0.1900

. *Nilai F test Prob = 0.00 menunjukkan hasil signifikan. Artinya Random Effect lebih baik dibandingkan Fixed ef

```
. regress JumlahPendudukMiskin PendapatanPajakProvinsi
```

Source	SS	df	MS	Number of obs	=	102
				F(1, 100)	=	29.41
Model	26923649.2	1	26923649.2	Prob > F	=	0.0000
Residual	91546900.6	100	915469.006	R-squared	=	0.2273
				Adj R-squared	=	0.2195
Total	118470550	101	1172975.74	Root MSE	=	956.8

JumlahPendudukMiskin	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
PendapatanPajakProvinsi	6.94e-08	1.28e-08	5.42	0.000	4.40e-08	9.48e-08
_cons	490.5736	108.3402	4.53	0.000	275.6297	705.5175

```
. xtreg JumlahPendudukMiskin PendapatanPajakProvinsi, fe

Fixed-effects (within) regression               Number of obs      =       102
Group variable: Provinsi                        Number of groups   =        34

R-squared:                                      Obs per group:
     Within  = 0.0073                                         min =         3
     Between = 0.2317                                         avg =       3.0
     Overall = 0.2273                                         max =         3

                                                F(1,67)            =      0.49
corr(u_i, Xb) = 0.4430                          Prob > F           =    0.4857
```

JumlahPendudukMiskin	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
PendapatanPajakProvinsi	6.36e-09	9.08e-09	0.70	0.486	-1.18e-08	2.45e-08
_cons	749.4748	38.32588	19.56	0.000	672.976	825.9736
sigma_u	1069.3867					
sigma_e	90.22968					
rho	.99293116	(fraction of variance due to u_i)				

F test that all u_i=0: F(33, 67) = 338.72 Prob > F = 0.0000

```
. *Nilai F test Prob = 0.00 menunjukkan hasil signifikan. Artinya Fiixed Effect lebih baik dibandingkan
Common ef

. estimates store fixed

. xtreg JumlahPendudukMiskin PendapatanPajakProvinsi, Re
option Re not allowed
r(198);

. xtreg JumlahPendudukMiskin PendapatanPajakProvinsi, re

Random-effects GLS regression                   Number of obs     =       102
Group variable: Provinsi                        Number of groups  =        34

R-squared:                                      Obs per group:
     Within  = 0.0073                                         min =         3
     Between = 0.2317                                         avg =       3.0
     Overall = 0.2273                                         max =         3

                                                Wald chi2(1)      =      3.07
corr(u_i, X) = 0 (assumed)                      Prob > chi2       =    0.0796
```

JumlahPendudukMiskin	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
PendapatanPajakProvinsi	1.52e-08	8.67e-09	1.75	0.080	-1.80e-09	3.22e-08
_cons	713.1777	175.1006	4.07	0.000	369.9868	1056.368
sigma_u	970.07818					
sigma_e	90.22968					
rho	.99142282	(fraction of variance due to u_i)				

```
. estimates store random
```

```
. hausman fixed random
```

	Coefficients (b) fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) Std. err.
Pe~kProvinsi	6.36e-09	1.52e-08	-8.84e-09	2.68e-09

```
                b = Consistent under H0 and Ha; obtained from xtreg.
     B = Inconsistent under Ha, efficient under H0; obtained from xtreg.

Test of H0: Difference in coefficients not systematic

    chi2(1) = (b-B)'[(V_b-V_B)^(-1)](b-B)
            =  10.91
Prob > chi2 = 0.0010


. *Nilai F test Prob = 0.0010 menunjukkan hasil signifikan.
Artinya fixed Effect lebih baik dibandingkan random e

. xtreg JumlahPendudukMiskin PendapatanPajakProvinsi, re

Random-effects GLS regression                   Number of obs     =       102
Group variable: Provinsi                        Number of groups  =        34

R-squared:                                      Obs per group:
     Within  = 0.0073                                         min =         3
     Between = 0.2317                                         avg =       3.0
     Overall = 0.2273                                         max =         3

                                                Wald chi2(1)      =      3.07
corr(u_i, X) = 0 (assumed)                      Prob > chi2       =    0.0796
```

JumlahPendudukMiskin	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
PendapatanPajakProvinsi	1.52e-08	8.67e-09	1.75	0.080	-1.80e-09	3.22e-08
_cons	713.1777	175.1006	4.07	0.000	369.9868	1056.368
sigma_u	970.07818					
sigma_e	90.22968					
rho	.99142282	(fraction of variance due to u_i)				

. regress FasilitasKesehatanDasar PendapatanPajakProvinsi

Source	SS	df	MS			
Model	13.3091442	1	13.3091442	Number of obs	=	102
Residual	10247.7796	100	102.477796	F(1, 100)	=	0.13
				Prob > F	=	0.7193
Total	10261.0888	101	101.594938	R-squared	=	0.0013
				Adj R-squared	=	-0.0087
				Root MSE	=	10.123

FasilitasKesehatanDasar	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
PendapatanPajakProvinsi	4.88e-11	1.35e-10	0.36	0.719	-2.20e-10	3.17e-10
_cons	77.02185	1.146259	67.19	0.000	74.74771	79.296

. xtreg FasilitasKesehatanDasar PendapatanPajakProvinsi, fe

Fixed-effects (within) regression
Group variable: Provinsi

Number of obs	=	102
Number of groups	=	34

R-squared:
Within = 0.0001
Between = 0.0013
Overall = 0.0013

Obs per group:
min = 3
avg = 3.0
max = 3

F(1,67)	=	0.01
Prob > F	=	0.9227

corr(u_i, Xb) = 0.0194

FasilitasKesehatanDasar	Coefficient	Std. err.	t	P>|t|	[95% conf.	interval]
PendapatanPajakProvinsi	2.30e-11	2.36e-10	0.10	0.923	-4.48e-10	4.94e-10
_cons	77.12786	.9961579	77.43	0.000	75.13952	79.11619
sigma_u	9.9914086					
sigma_e	2.3452301					
rho	.94778135	(fraction of variance due to u_i)				

F test that all u_i=0: F(33, 67) = 54.43 Prob > F = 0.0000

. *Nilai F test Prob = 0.00 menunjukkan hasil signifikan. Artinya Fiixed Effect lebih baik dibandingkan Common ef

. estimates store fixed

. xtreg FasilitasKesehatanDasar PendapatanPajakProvinsi, re

Random-effects GLS regression — Number of obs = 102
Group variable: **Provinsi** — Number of groups = 34

R-squared: — Obs per group:
Within = 0.0001 — min = 3
Between = 0.0013 — avg = 3.0
Overall = 0.0013 — max = 3

Wald chi2(0) = .
corr(u_i, X) = 0 (assumed) — Prob > chi2 = .

FasilitasKesehatanDasar	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
PendapatanPajakProvinsi	3.61e-11	1.66e-10	0.22	0.828	-2.90e-10	3.62e-10
_cons	77.07418	1.861082	41.41	0.000	73.42653	80.72184
sigma_u	10.053608					
sigma_e	2.3452301					
rho	.94839224	(fraction of variance due to u_i)				

. estimates store random

. hausman fixed random

	Coefficients (b) fixed	(B) random	(b-B) Difference	sqrt(diag(V_b-V_B)) Std. err.
Pe~kProvinsi	2.30e-11	3.61e-11	-1.31e-11	1.67e-10

b = Consistent under H0 and Ha; obtained from **xtreg**. B = Inconsistent under Ha, efficient under H0; obtained from **xtreg**.

Test of H0: Difference in coefficients not systematic chi2(1) = (b-B)'[(V_b-V_B)^(-1)](b-B)
= 0.01
Prob > chi2 = 0.9377

. *Nilai F test Prob = 0.9377 menunjukkan hasil tidak signifikan. Artinya random Effect lebih baik dibandingkan f

. xtreg FasilitasKesehatanDasar PendapatanPajakProvinsi, re

Random-effects GLS regression — Number of obs = 102
Group variable: **Provinsi** — Number of groups = 34

R-squared: — Obs per group:
Within = 0.0001 — min = 3
Between = 0.0013 — avg = 3.0
Overall = 0.0013 — max = 3

Wald chi2(0) = .
corr(u_i, X) = 0 (assumed) — Prob > chi2 = .

FasilitasKesehatanDasar	Coefficient	Std. err.	z	P>|z|	[95% conf.	interval]
PendapatanPajakProvinsi	3.61e-11	1.66e-10	0.22	0.828	-2.90e-10	3.62e-10
_cons	77.07418	1.861082	41.41	0.000	73.42653	80.72184
sigma_u	10.053608					
sigma_e	2.3452301					
rho	.94839224	(fraction of variance due to u_i)				

. xttest0

Breusch and Pagan Lagrangian multiplier test for random effects FasilitasKesehatanDasar[Provinsi,t] =

Xb + u[Provinsi] + e[Provinsi,t] Estimated results:

	Var	SD = sqrt(Var)
Fasilit~r	101.5949	10.07943
e	5.500104	2.34523
u	101.075	10.05361

Test: Var(u) = 0

chibar2(01) = 91.29
Prob > chibar2 = 0.0000