

Regional Taxes as a Pillar for Increasing PAD: Analysis of Effectiveness, Contribution, and Efficiency in North Maluku Province

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Abstract. This study aims to strengthen fiscal independence by increasing the effectiveness of tax revenue, administrative efficiency, and taxpayer awareness, so that regional taxes truly become a pillar of increasing regional revenue (PPH) in North Maluku. The type of data used is secondary data in the form of reports on the realization of the State Revenue and Expenditure Budget (PPH), specifically data on regional tax revenue, PPH, and tax revenue costs for the 2020–2024 period. Data were obtained from official documents of the Regional Financial Management Agency (BAPENDA) and publications from the Central Statistics Agency (BPS). The data analysis method was carried out in three stages. First, effectiveness analysis, namely by calculating the ratio of regional tax realization to the regional tax target. Second, contribution analysis, namely by calculating the ratio of regional tax realization to total PPH. Third, efficiency analysis, namely by calculating the ratio between revenue costs and regional tax realization. The results of the analysis were then categorized based on the effectiveness, contribution, and efficiency assessment standards commonly used in regional financial research.

Keywords: Regional Tax, PAD, Effectiveness, Contribution, Efficiency

1 Introduction

Locally Generated Revenue (PAD) plays a crucial role in achieving regional fiscal independence. The greater the PAD contribution to the Regional Budget (APBD), the lower the local government's dependence on central government transfers and the greater the fiscal space available to finance development according to local needs. Fiscal independence through PAD not only reflects a region's ability to manage its resources but also serves as an indicator of the quality of public financial governance at the regional level [1] [2]. From a theoretical perspective, taxes are viewed from various perspectives. The theory of carrying capacity emphasizes the principle of justice, stating that the tax burden must be commensurate with the taxpayer's ability to bear it, so as not to cause social distortion [3].

Meanwhile, the devotional theory views taxes as a form of community service to the state or region because the government has provided the means to support communal life. Both theories demonstrate that taxes function not only as a fiscal instrument but also have ethical and social dimensions that underlie the legitimacy of their collection. Among the components of PAD, regional taxes occupy a strategic position. Regional taxes serve a dual function: as a budgetary instrument that provides funds for development financing, and as a regulatory instrument that local governments can use to direct community economic activity [4].

Therefore, measuring the effectiveness, contribution, and efficiency of regional taxes is highly relevant for assessing regional fiscal performance. Revenue realization that meets or exceeds targets is an indicator of effectiveness, while efficiency is measured by the comparison between collection costs and the results obtained. The contribution of regional taxes is measured by their role in total PAD, which reflects the extent of the region's fiscal dependence on this revenue source [5].

The phenomenon in North Maluku Province shows that the contribution of regional taxes to PAD has fluctuated over the past five years. In some years, regional tax realization has reached the effective category, but in other years it has actually decreased due to low taxpayer awareness, limited collection capacity, and the impact of the Covid-19 pandemic [6]. This situation underscores the challenges in optimizing the tax base and improving regional tax administration.

Previous research in North Maluku indicated that regional taxes were once categorized as effective and efficient, with a significant contribution to PAD during the 2010–2014 period. However, such research is relatively rare, using updated data following major dynamics such as the pandemic and changes in regional tax regulations. Therefore, this study presents a novel approach by conducting a comprehensive analysis of the effectiveness, efficiency, and contribution of regional taxes in North Maluku during the 2020–2024 period. Therefore, this research is expected to make important contributions, both theoretically and practically. Theoretically, this study enriches the literature on fiscal decentralization by emphasizing the role of regional taxes as a key pillar of PAD in the archipelagic region. Practically, this research generates strategic recommendations for regional governments to strengthen fiscal independence by improving collection effectiveness, administrative efficiency, and taxpayer awareness, so that regional taxes truly become a pillar of increasing PAD in North Maluku.

2 Literature Review

2.1 Regional Tax

According to Law Number 1 of 2022 concerning Financial Relations between the Central and Regional Governments, regional taxes are mandatory contributions owed by individuals or entities to the region, are mandatory based on law, without direct compensation, and are used for the benefit of the region for the greatest prosperity of the people [7]. Regional taxes are the main component of PAD which determines the fiscal capacity of the region [4] as well as a form of fiscal decentralization that gives

the region the authority to explore revenue sources independently [8]. Regional taxes have two main functions, namely the budgetary function as the main source of financing for the implementation of regional government and development, and the regulatory function as an instrument for controlling the economic and social behavior of the community [9]. Based on Law No. 1 of 2022, types of regional taxes consist of provincial taxes (e.g., PKB, BBNKB, PBBKB, surface water tax, and cigarette tax) and district/city taxes (including hotel, restaurant, entertainment, advertising, street lighting, non-metallic minerals and rocks, parking, groundwater, swallow's nest, PBB-P2, and BPHTB taxes). With a significant contribution to PAD, regional taxes play a strategic role in reducing dependence on transfer funds from the center, increasing fiscal independence, while also being a pillar of regional development, although the effectiveness of their collection still faces obstacles such as low taxpayer awareness and limited administrative capacity in many regions, including North Maluku.

2.2 Regional Original Income

PAD is revenue obtained by a region from sources within its own territory collected based on regional regulations, consisting of regional taxes, regional levies, results from the management of separated regional assets, and other legitimate PAD as regulated in Law Number 33 of 2004 concerning Fiscal Balance between the Central and Regional Governments and strengthened in Law Number 1 of 2022 concerning Central and Regional Financial Relations [7]. According to Karianga [2], the large contribution of PAD to the APBD reflects the fiscal independence of a region, where regions with high PAD are considered more capable of financing development independently, while heavy dependence on central transfers indicates weak fiscal capacity. In the context of fiscal decentralization, optimizing PAD is a key requirement for the success of regional autonomy because it provides flexibility for regional governments in determining development priorities, strengthening fiscal accountability, and reducing dependence on central transfer funds.

2.3 Regional Tax Effectiveness

Regional tax effectiveness is a measure of the extent to which regional tax revenue targets can be achieved in accordance with the potential and plans set out in the APBD. According to Elim [5], effectiveness is measured by comparing realized regional tax revenue with the set targets, where a ratio above 100% indicates a very effective category, 90–100% effective, 80–89% quite effective, 60–79% less effective, and below 60% ineffective. This level of effectiveness not only reflects the technical performance of tax collection but also illustrates the extent to which local governments are able to optimize existing tax potential through realistic target planning, adequate administrative systems, and taxpayer compliance. Therefore, regional tax effectiveness is an important indicator in assessing fiscal capacity and regional independence within a decentralization framework.

2.4 Regional Tax Contribution

Regional tax contributions are a measure of the extent to which regional tax revenue contributes to total PAD, reflecting the level of fiscal dependence of the regional government on this revenue source. According to Rahma [10], a high regional tax contribution indicates that regional taxes are the dominant source of PAD and indicates greater fiscal independence. While a low contribution indicates the need for diversification into other revenue sources, such as regional levies, proceeds from the management of separated regional assets, and innovations in other legitimate revenue sources. The magnitude of regional tax contributions is also influenced by external factors such as economic conditions, the level of taxpayer compliance, and the effectiveness of collection policies implemented by the regional government. Therefore, analyzing regional tax contributions is important to understand the role of regional taxes as a pillar of PAD and as a basis for formulating strategies to increase regional revenue more sustainably.

2.5 Regional Tax Efficiency

Regional tax efficiency relates to the ability of local governments to implement tax collection at minimal cost while generating optimal revenue. According to Muslimin et al. [11], tax collection is considered efficient if the costs incurred are relatively small compared to the revenue obtained, so that the resulting fiscal benefits outweigh the administrative costs incurred. This level of efficiency can be an indicator of the quality of regional tax governance, because the more efficient a region is in collecting taxes, the greater the fiscal space available for development financing. Conversely, if collection costs are relatively high while revenue is low, tax collection is considered inefficient and can lead to budget waste. Therefore, increasing the efficiency of regional tax collection through improving administrative systems, utilizing digital technology, and increasing the capacity of the apparatus is key to strengthening regional fiscal independence.

3 Research Methodology

3.1 Research Approach and Data Collection Technique

This study uses a descriptive quantitative approach to analyze the effectiveness, contribution, and efficiency of regional taxes on PAD in North Maluku Province. The variables analyzed include: (1) Regional Tax Effectiveness, measured by comparing realized regional tax revenue with the target set in the APBD; (2) Regional Tax Contribution, measured by comparing realized regional tax revenue with total PAD; and (3) Regional Tax Efficiency, analyzed by comparing collection costs with regional tax revenue.

The data used is secondary data in the form of reports on the realization of the North Maluku Provincial APBD, specifically data on regional tax revenue, PAD, and tax collection costs for the 2020–2024 period. Data were obtained from official

documents of the Regional Financial Management Agency (BAPBD), the Regional Revenue Agency (Bapenda), and publications from the Central Statistics Agency (BPS).

3.2 Data Analysis Method

The data analysis method was conducted in three stages. First, an effectiveness analysis, which calculated the ratio of regional tax realization to the regional tax target. Second, a contribution analysis, which calculated the ratio of regional tax realization to total PAD. Third, an efficiency analysis, which calculated the ratio between collection costs and regional tax realization. The results of the analysis were then categorized based on the effectiveness, contribution, and efficiency assessment standards commonly used in regional financial research.

With this approach, the research is expected to provide a comprehensive picture of regional tax performance in North Maluku Province, thus explaining the extent to which regional taxes play a role as a pillar in increasing PAD and providing strategic input for improving regional financial governance in the future.

4 Results and Discussion

4.1 Results

Regional Tax Effectiveness.

The effectiveness of regional tax revenue reflects the extent to which local governments are able to achieve the targets set in the APBD. Effectiveness analysis is important because it indicates the level of achievement of local governments' fiscal performance in mobilizing tax potential to support PAD. The higher the ratio of realization to target, the better the region's fiscal capacity. Conversely, low effectiveness indicates obstacles to tax collection, whether from administrative aspects, taxpayer compliance, or external conditions such as the economic slowdown. To examine the performance of regional taxes in North Maluku Province, the following data presents the effectiveness of regional tax revenue for the 2020–2024 period.

Table 1. Effectiveness of Regional Taxes in North Maluku Province 2020–2024

Year	Regional Tax Targets (Rp Billion)	Regional Tax Realization (Rp Billion)	Effectiveness (%)	Criteria
2020	210,0	185,4	88,29	Quite Effective
2021	220,0	192,1	87,32	Quite Effective
2022	230,0	226,7	98,61	Quite Effective
2023	245,0	242,8	99,10	Quite Effective
2024	260,0	254,5	97,88	Quite Effective

Source: Secondary data processed, Researcher 2025

The calculation results in Table 1 show that the effectiveness of regional taxes in North Maluku Province was in the moderately effective category in 2020–2021 due to

the impact of the COVID-19 pandemic, which suppressed economic activity. However, from 2022 to 2024, effectiveness returned to the effective category, indicating economic recovery and improvements in regional tax collection administration.

Regional Tax Contribution to PAD.

The contribution of regional taxes to PAD indicates the extent to which local taxes contribute to a region's fiscal capacity. This indicator is crucial for assessing a region's dependence on taxes as its primary revenue source. According to Rahma et al. [10], a high contribution indicates that local taxes are the backbone of PAD, while a low contribution indicates the need for diversification of regional revenue. Therefore, analyzing local tax contributions helps understand the strategic position of taxes within the PAD structure and the potential room for improvement.

Table 2. Regional Tax Contribution to North Maluku Province's PAD 2020–2024

Year	Regional Tax Realization (Rp Billion)	PAD (Rp Billion)	Contribution (%)	Criteria
2020	185,4	420,0	44,14	Currently
2021	192,1	470,0	40,89	Currently
2022	226,7	520,0	43,59	Currently
2023	242,8	560,0	43,36	Currently
2024	254,5	590,0	43,13	Currently

Source: Secondary data processed, researcher 2025

The calculation results in Table 2 show that the contribution of regional taxes to North Maluku Province's Regional Original Revenue (PAD) during the 2020–2024 period was relatively stable at around 40–44%, categorized as moderate. This means that regional taxes are a key pillar of PAD, but they are not yet fully dominant. This situation indicates that the regional government still needs to increase its tax base, improve taxpayer compliance, and strengthen other PAD sources to reduce dependence on central transfers.

Regional Tax Efficiency.

Regional tax efficiency reflects the extent to which a local government is able to collect taxes at a low cost compared to the revenue generated. According to Muslimin et al. [11], tax collection is considered efficient if the collection costs are relatively small compared to the tax revenues. This indicator is important because high efficiency ensures that tax revenues truly provide fiscal benefits to the region, without being burdened by large administrative costs.

Table 3. Regional Tax Efficiency in North Maluku Province, 2020–2024

Year	Collection Fees (Rp Billion)	Regional Tax Realization (Rp Billion)	Efficiency (%)	Criteria
2020	6,1	185,4	3,29	Very Efficient
2021	6,3	192,1	3,28	Very Efficient

2022	6,8	226,7	3,00	Very Efficient
2023	7,0	242,8	2,88	Very Efficient
2024	7,2	254,5	2,83	Very Efficient

Source: Secondary data processed, pesearcher 2025

Table 3 shows that the efficiency of regional tax collection in North Maluku Province during the 2020–2024 period consistently fell into the very efficient category, with a collection cost ratio below 5% of realized regional taxes. This indicates that regional tax administration is operating optimally, maximizing tax revenue without burdening regional finances.

4.2 Discussion

Regional Tax Effectiveness.

Research results indicate that the effectiveness of North Maluku's regional taxes in 2020–2021 was only moderately effective, before increasing to effective in 2022–2024. The decline in effectiveness in the 2020–2021 period demonstrates the sensitivity of regional tax revenues to external economic shocks caused by the COVID-19 pandemic. However, the persistence of the efficiency ratio below 5% during the same period demonstrates that internal administrative performance in managing the operational burden of collection remains well-controlled amid the crisis. This condition aligns with the Bearing Power Theory, which emphasizes that tax obligations must be adjusted to the community's economic capacity. When the COVID-19 pandemic struck, the community's ability to fulfill tax obligations decreased, thus weakening target achievement. However, after the economic recovery, the community was again able to pay taxes according to their economic capacity, resulting in increased effectiveness. This finding is consistent with research by Arbas [9], which states that tax revenue effectiveness is strongly influenced by macroeconomic conditions and taxpayer compliance. These results also support research by Rahma et al. [10], which found that regional tax effectiveness tends to increase along with improvements in governance and economic stability. Thus, regional tax effectiveness in North Maluku demonstrates an adaptive pattern to socio-economic dynamics.

Regional Tax Contribution to PAD.

North Maluku's regional tax contribution to PAD is stable at around 40–44%, or in the moderate category. Entering 2024, regional tax performance in North Maluku Province was also influenced by the effective implementation of Law Number 1 of 2022 concerning Regional Revenue and Expenditure Management (HKPD). Although 2022–2023 was a regulatory transition phase, the full implementation of this law in 2024, through tariff restructuring and strengthening tax administration, proved successful in maintaining the contribution ratio at 40–44% and maintaining the efficiency ratio below 5% through the use of a more integrated system. The research results show that regional taxes play a significant role, but are not yet the mainstay of PAD. This stable contribution portion does not reflect a weakening of other regional

revenue components, as analysis of nominal data demonstrates that other PAD components—such as levies and proceeds from the management of separated regional assets—continued to grow positively post-pandemic. Therefore, this dominant percentage purely reflects real growth and the strengthening of the regional tax collection base in North Maluku Province during the observation period. This finding confirms that regional taxes act as a key pillar of PAD, although their contribution is not yet fully dominant. Therefore, local governments still need to expand the tax base, improve taxpayer compliance, and strengthen all other regional revenue sources to reduce dependence on central transfer funds. This situation aligns with the Devotion Theory, which views taxes as a form of community contribution to the state/region for enjoying public services. This means that although tax awareness exists, the optimization of this contribution remains limited. This finding is consistent with research by Karianga [2], which emphasizes that a large PAD contribution is an indicator of regional fiscal independence, and a low contribution indicates dependence on central transfers. Research by Rahma et al. [10] also supports this, stating that moderate regional tax contributions indicate the need to diversify regional revenue sources. Therefore, this study confirms that North Maluku needs to expand its tax base and optimize other PAD sources to increase fiscal independence.

The research results show that the contribution of local taxes to PAD in North Maluku Province is relatively stable at around 40–44%, classified as moderate. This finding indicates that although local taxes play a significant role, they have not yet become the primary source of PAD. This stable contribution does not reflect a weakening of other non-tax regional revenue components, as nominal data analysis indicates that other PAD components—such as regional levies and proceeds from the management of separated regional assets—continued to grow positively post-pandemic. Therefore, this dominant percentage purely reflects real growth and a strengthening of the local tax collection base in North Maluku Province during the observation period.

Entering 2024, local tax performance in North Maluku Province will also be influenced by the effective implementation of Law Number 1 of 2022 concerning Financial Relations between the Central Government and Regional Governments (HKPD Law). Although the 2022–2023 period was a regulatory transition phase, the full implementation of this law in 2024—through tariff restructuring and strengthening tax administration—proven successful in maintaining the contribution ratio at 40–44% while maintaining the efficiency ratio below 5% through the use of a more integrated system. Theoretically, this situation aligns with the Service Theory, which views taxes as a form of community contribution to the state or region in order to enjoy public services.

The phenomenon in North Maluku indicates that although public tax awareness has been established, the level of optimization of contributions remains limited. Empirically, this finding is consistent with research by Karianga [2], which emphasizes that a large contribution from local revenue (PAD) is a key indicator of regional fiscal independence, while a low contribution indicates a high dependence on central transfer funds. This study is also supported by research by Rahma et al. [10], who stated that moderate regional tax contributions signal the need for a strategy to

diversify revenue sources. Thus, these findings confirm that regional taxes act as a key pillar of PAD, even though their contribution is not yet fully dominant. Therefore, the North Maluku Provincial Government still needs to expand the tax base, improve taxpayer compliance, and optimize all other PAD sources to strengthen fiscal independence and reduce dependence on central government transfer funds.

Regional Tax Efficiency.

The analysis shows that North Maluku's regional tax efficiency from 2020–2024 consistently fell into the very efficient category, with a collection cost ratio of only 2.8–3.3% of realized revenue. These results support the principle of efficiency in public finance theory, which states that effective tax collection should generate maximum revenue at minimal cost. This efficiency demonstrates that regional tax administration has been effective and cost-effective, thus increasing the fiscal value of every rupiah collected. Research by Muslimin et al. [11] emphasized that tax efficiency is crucial for maintaining regional fiscal sustainability, as high collection costs will reduce revenue benefits. Similar research by Sartono & Zulkifli [12] also showed that regions with good tax administration systems tend to have low efficiency ratios, thus maintaining a manageable regional financial burden. Therefore, the results of this study demonstrate that efficiency is not a major issue in North Maluku; the main challenge is to increase the effectiveness and contribution of taxes to PAD.

5 Conclusion

This study concludes that regional taxes in North Maluku Province during the 2020–2024 period had a level of effectiveness that had declined during the pandemic but then rebounded to become effective, with stable contributions in the range of 40–44%, thus categorized as moderate, and excellent efficiency with a collection cost ratio consistently below 5%. These results confirm that regional taxes play a significant role as a pillar of local revenue (PAD), although their contribution is not yet fully dominant. Theoretically, these findings reinforce the Power of Bearing Theory, which emphasizes the alignment of tax obligations with the economic capacity of the community, and the Devotion Theory, which views taxes as a form of contribution to the state/region. They also support previous empirical literature stating that tax effectiveness and efficiency tend to increase with improvements in regional fiscal governance. Practically, the North Maluku regional government needs to expand its tax base, increase taxpayer compliance, accelerate administrative digitization, and diversify other PAD sources to reduce dependence on central transfers. Thus, regional taxes serve not only as a source of revenue but also as a strategic instrument for achieving fiscal independence and strengthening sustainable regional development.

However, this study has limitations in terms of the scope of the analysis indicators. The evaluation was limited to three key financial ratios (effectiveness, contribution, and efficiency) to focus on assessing the administrative performance and internal accountability of regional tax collection agencies. This study did not integrate external variables such as tax capacity, tax effort, the level of taxpayer compliance at the

micro level, regional economic growth, and the dynamics of macro-fiscal policy changes. This limited scope of indicators has the potential to limit the completeness of conclusions in mapping the causal factors of economic determinants comprehensively. Therefore, further research is recommended to expand the analysis model by combining internal financial ratios and macroeconomic indicators to produce a more holistic portrait of fiscal independence. Furthermore, this study is limited to a single case analysis in North Maluku Province, without comparability with other regions. Future research is recommended to employ spatial analysis or comparisons between provinces with similar fiscal characteristics to produce a more comprehensive evaluation of local tax performance at the regional scale.

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