

OPTIMIZING NON-TAX REVENUE AT CLASS III AIRPORTS: A POLICY ANALYSIS

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ABSTRACT : Non-Tax State Revenue (PNBP) is a crucial component in supporting the fiscal sustainability of the airport sector, particularly at Class III airports with limited traffic volume and revenue capacity. An unbalanced revenue structure has the potential to increase fiscal vulnerability to external shocks. This study aims to analyze PNBP management policies and their implications for fiscal resilience at Class III airports. This study uses a qualitative approach through policy analysis with a case study design at Sangia Nibandera Airport. Data were obtained from PNBP realization reports, related regulations, and supporting policy documents, which were analyzed descriptively and analytically. The analysis results show that PNBP realization in 2022 only reached 60.20% of the target. The revenue structure is dominated by passenger-based aeronautical revenue, with Aircraft Passenger Services (PJP2U) contributing 72.20%, while non-aeronautical revenue contributed less than 10%. This dependence increases fiscal vulnerability to fluctuations in passenger numbers and flight frequencies. This study concludes that optimizing PNBP requires strengthening governance, diversifying non-aeronautical revenues, and establishing risk-based targets to improve fiscal resilience.

Keywords: *PNBP; Policy Analysis; Class III Airport; Fiscal Resilience*

Code JEL : *D78; H21; L32*

INTRODUCTION

Non-Tax State Revenue (PNBP) is a crucial component of the state revenue structure, supporting the financing of government administration and public services. In the air transportation sector, PNBP not only serves as a source of fiscal revenue but also reflects the effectiveness of state asset management, the quality of public service governance, and the sustainability of airport operations. Therefore, the performance of PNBP in the airport sector is a strategic issue in the context of state financial management.

The challenges of PNBP management become increasingly complex at small-scale airports, particularly Class III airports. The characteristics of Class III airports, characterized by limited passenger numbers, flight frequencies, and business development opportunities, lead to a revenue structure that tends to rely on volume-based aeronautical services. This dependence has the

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potential to increase fiscal vulnerability when external disruptions occur, such as changes in transportation policy, energy price fluctuations, or restrictions on public mobility.

From a public policy perspective, PNBP issues at Class III airports are not solely related to operational aspects, but also concern revenue governance, target-setting mechanisms, and the policy system's ability to respond to risks. Limited policy flexibility and low diversification of revenue sources can weaken airport fiscal resilience in the long term. Therefore, analyzing non-tax state revenue (PNBP) policies at Class III airports is crucial for understanding existing structural issues and identifying more adaptive and sustainable policy approaches.

THE LITERATURE REVIEW

In Indonesia's public finance system, Non-Tax State Revenue (PNBP) is central government revenue derived from the utilization of state services, resources, and assets outside the taxation sector, as regulated in Law Number 9 of 2018 [1]. In the air transportation sector, PNBP originates from aeronautical and non-aeronautical services managed by airport authorities in accordance with applicable aviation and fiscal regulations [2]. This regulatory framework serves as the institutional basis for managing PNBP in the airport sector.

Various previous studies have shown that the PNBP structure at Class III airports is dominated by passenger-based aeronautical revenue, which is highly dependent on passenger volume and flight frequency [3], [4]. This revenue concentration increases fiscal vulnerability, particularly when external shocks occur, such as mobility restrictions, fuel price volatility, and changes in aviation policy. Several empirical studies have also confirmed that limited diversification of non-aeronautical revenue limits fiscal resilience and undermines the operational sustainability of small-scale airports [5], [6]. When passenger activity declines, non-aeronautical revenue—such as concessions, space rentals, and support services—tends to decline as well, creating a domino effect that increases revenue volatility. Below is a picture of the framework for thinking:

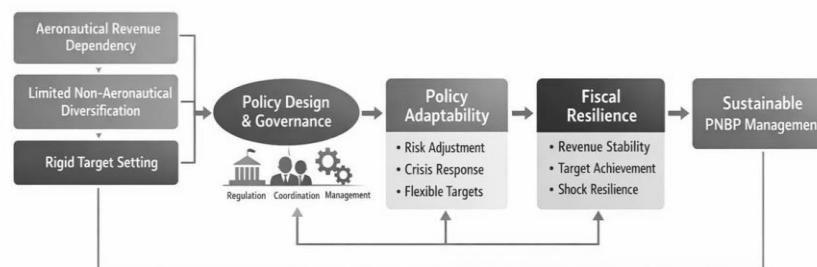


Figure 1. Research Framework

The conceptual framework in the figure explains that optimizing Non-Tax State Revenue (PNBP) at Class III airports stems from structural issues such as dependence on passenger-based aeronautical revenue, low diversification of non-aeronautical revenue, and rigid, historically based

target-setting mechanisms. These three factors create initial vulnerabilities that are then processed through policy design and governance, encompassing regulation, coordination, and revenue management. The quality of this policy design determines the level of policy adaptability, namely the ability to make risk-based adjustments, respond to crises, and flexibly target targets. This level of adaptability subsequently influences fiscal resilience, which is reflected in revenue stability, target achievement, and resilience to external shocks. Ultimately, if the revenue structure is improved, governance is strengthened, and policies are adaptive, sustainable PNB management will be achieved. Furthermore, studies on public revenue management emphasize that target-setting mechanisms that rely on historical realizations can reduce policy adaptability in the face of changing operational risks [7], [9]. Rigid planning frameworks often limit the ability of revenue policies to respond effectively to shocks, widening the gap between revenue targets and realizations. Other studies also highlight the importance of quality governance and inter-agency coordination in improving non-tax state revenue performance. Strengthening revenue governance and stakeholder collaboration has been shown to support optimal asset utilization and enhance long-term revenue sustainability [5], [15]. Overall, the existing literature confirms that non-tax revenue issues at Class III airports are not solely operational in nature, but are closely related to revenue structure, policy design, and governance mechanisms. However, most previous research focuses on descriptive performance analysis and is relatively limited in discussing adaptive policy frameworks. Therefore, a qualitative policy analysis is needed to examine structural constraints on revenue and formulate strategies to increase fiscal resilience at class III airports.

Based on a synthesis of policy literature and empirical findings regarding the management of Non-Tax State Revenue (PNBP) at Class III airports, this study aims to analyze structural constraints on revenue and identify policy strategies that can improve fiscal resilience through a qualitative policy analysis approach.

Based on these objectives, this study formulates the following analytical propositions:

- P1: The dominance of passenger-based aeronautical revenue in the PNB structure of Class III airports creates structural vulnerability to external shocks.
- P2: Limited diversification of non-aeronautical revenue sources limits the fiscal resilience of Class III airports.
- P3: The mechanism for setting revenue targets that relies on historical realizations limits policy adaptability in addressing changing operational risks.
- P4: Strengthening revenue governance and inter-agency coordination enhances the sustainability of PNB management at Class III airports.

METHODS

This study uses a qualitative approach with a descriptive-analytical design to analyze Non-Tax State Revenue (PNBP) management policies at Class III airports. This approach was chosen to gain an in-depth understanding of the policy process, revenue governance, and structural

constraints that influence the achievement of PNBPN targets, using a case study of Sangia Nibandera Airport in Kolaka [10], [11]. This research expands on previous empirical findings within an evidence-based policy analysis framework [12], [13].

The research was conducted through several stages. First, the research focus and study objects were determined based on the characteristics of Class III airports. Second, primary and secondary data were collected. Primary data were obtained through semi-structured interviews with the Airport Manager, Revenue Treasurer, and PNBPN payers, as well as direct observation of the operational and administrative processes of revenue. Secondary data were collected through documentation studies and literature reviews, including legislation related to PNBPN, PNBPN realization and target reports, and literature on public policy and state finance [1], [5], [14].

Third, the analysis constructs were operationalized. Non-Tax State Revenue (PNBPN) management is analyzed through the stages of target planning, collection, deposit, and administration and reporting of revenues in accordance with applicable regulations [1], [5]. Fiscal resilience is analyzed qualitatively through revenue structure, target achievement levels, and the level of revenue diversification between aeronautical and non-aeronautical sources [7], [9]. Policy adaptability is analyzed through the flexibility of target setting and the policy's ability to respond to operational risks and external shocks [12], [15].

Fourth, data analysis is conducted through policy data reduction, presentation of empirical findings, and analytical synthesis using a public policy framework. Furthermore, policy benchmarking is conducted to compare non-tax state revenue management practices at airports with similar characteristics to identify relevant best practices [15]. Data validity is maintained through source triangulation and analytical consistency.

RESULT & DISCUSSION

Field observations indicate that the decline in flight frequency during the COVID-19 pandemic directly impacted the performance of Non-Tax State Revenue (PNBPN) at Sangia Nibandera Airport. The decline in passenger numbers led to a significant decline in Aircraft Passenger Services (PJP2U) revenue, followed by a decline in Aircraft Landing, Placement, and Storage Services (PJP4U) revenue, as well as revenue from other services dependent on passenger volume, such as check-in counter services. Mobility restrictions, increased travel requirements, and rising aviation fuel prices also reduced flight activity and prompted the closure of a number of routes deemed uneconomical, further limiting the airport's revenue potential.

Table 1. Target Achievement and Realization of Non-Tax State Revenues at the Kolaka Regional Government Office (KPPN)

Year	Target (Rp)	Realization (Rp)	Percentage
2018	4.550.900.000	4.555.890.100	89,12%
2019	4.701.100.000	4.713.120.560	87,49%
2020	4.800.300.000	805.340.120	16,78%

2021	4.900.300.000	1.011.210.080	20,64%
2022	2.885.600.000	1.941.131.200	60,20%

Source: Processed Research Data (2022)

Table 1 shows that Sangia Nibandera Airport's 2022 non-tax revenue realization reached 60.20% of the established target. The structure of non-tax revenue is dominated by passenger-based aeronautical revenue. Aircraft Passenger Services (PJP2U) contributed 72.20%, while Aircraft Landing, Positioning, and Storage Services (PJP4U) contributed 20.64%. Overall, non-aeronautical revenue contributed less than 10% to total non-tax revenue.

Field findings indicate that the mechanism for setting non-tax revenue targets is based on historical realizations and is set within a specific budget period, making it relatively unresponsive to changes in operational conditions. The revenue structure, which is highly dependent on passenger volume, causes fluctuations in passenger numbers to directly impact overall non-tax revenue performance.

Interviews indicate that non-tax revenue targets at Sangia Nibandera Airport are set through a bottom-up mechanism by the Revenue Treasurer and relevant officials, based on realizations from previous years. These targets were then set in the Budget Implementation List (DIPA) for a two-year period, making them less responsive to unforeseen changes in external conditions. The failure to achieve targets in the 2020–2021 period was primarily due to mobility restrictions and the temporary suspension of several flights during the COVID-19 pandemic. Although revenue performance began to improve in 2021, non-tax state revenue (PNBP) realization remained below 25% due to the prolonged implementation of Community Activity Restrictions (PPKM).

In 2022, the non-tax state revenue target was adjusted to take into account revenue performance during the pandemic. Non-tax state revenue showed a recovery trend compared to the previous two years, although it has not yet reached pre-pandemic levels. Interviews also revealed that the non-tax state revenue structure at Sangia Nibandera Airport is heavily dependent on passenger-based revenue. Aircraft Passenger Services (PJP2U) is the main contributor to non-tax state revenue, with a tariff of IDR 20,000 per passenger for a Class III airport. Therefore, fluctuations in passenger numbers directly impact overall non-tax state revenue performance.

An analysis of the 2022 non-tax state revenue structure shows a strong dominance of aeronautical revenue. The two-way transportation service (PJP2U) contributed Rp1,401,560,000 (72.20%), while the four-way transportation service (PJP4U) contributed Rp400,453,000 (20.63%). Non-aeronautical revenue contributed less than 10%, with check-in counter services accounting for 3.61%, while other sources—including space rental, advertising, electricity rental, concessions, and airport passes—cumulatively contributed less than 5%.

The decline in passenger activity was also accompanied by a decline in non-aeronautical revenue. Reduced terminal usage decreased concession revenue and demand for commercial space, while budget refocusing during the pandemic led to the cancellation of several airport development projects, which resulted in a decline in airport pass revenue. Furthermore, the

applicable regulatory framework limits adjustments to the PNBP target in the current fiscal year, contributing to the gap between planned targets and actual PNBP.

The dominance of passenger-based aeronautical revenue, as demonstrated in the study results, confirms the low level of diversification of non-tax state revenue (PNBP) at Class III airports. This condition reflects weak fiscal resilience, as revenue performance is highly dependent on external factors, such as fluctuations in passenger numbers and flight frequency. This finding aligns with previous research, which suggests that small-scale airports have a higher level of fiscal vulnerability due to their reliance on air traffic-based revenue.

From a policy adaptability perspective, the mechanism for setting non-tax state revenue targets, which relies on historical realizations, demonstrates limited flexibility in responding to operational risks. When external disruptions occur, the target-setting policy is unable to fully adapt to actual conditions, contributing to the gap between targets and realized revenues. This suggests that non-tax state revenue issues at Class III airports are not solely operational in nature but also stem from governance and revenue policy design.

The findings of this study demonstrate that the structure of non-tax state revenue (PNBP) at Class III airports is highly dependent on passenger volume-based aeronautical revenue, particularly Aircraft Passenger Services (PJP2U) and Aircraft Landing and Parking Services (PJP4U). This revenue concentration confirms Proposition 1 (P1), which states that the dominance of aeronautical revenue creates structural vulnerability to external shocks. When flight frequency and passenger demand decline, overall PNBP performance deteriorates significantly. This finding is consistent with previous studies showing that aeronautical revenue is strongly correlated with passenger traffic and is therefore highly sensitive to disruptions such as pandemics and policy changes in the aviation sector [4], [17], [18].

The limited contribution of non-aeronautical revenue further supports Proposition 2 (P2). Empirical evidence indicates that non-aeronautical revenues at Class III airports remain residual and largely dependent on passenger activity. As a result, a decline in passenger numbers generates a domino effect that simultaneously reduces aeronautical income and suppresses revenues from concessions, space rentals, advertising, and other supporting services. This condition aligns with the literature emphasizing that insufficient asset optimization weakens the fiscal resilience of small and medium-sized airports [1], [2], [5], [21].

In addition, the analysis reveals that PNBP target-setting mechanisms rely heavily on historical realization and remain rigid throughout the fiscal year. This finding substantiates Proposition 3 (P3), indicating that such rigidity limits policy adaptability in responding to changing operational risks. Consistent with public finance scenarios and policy planning literature, revenue targets that do not incorporate risk tend to widen the gap between planned and realized revenues during periods of external shock [22], [23].

Finally, the importance of strengthening revenue governance and stakeholder coordination, as identified in this study, supports Proposition 4 (P4). Effective coordination among airport management, central and local governments, technical ministries, and business actors enables

better asset utilization and policy alignment with regional economic potential. Prior studies confirm that cross-sector collaboration enhances non-aeronautical revenue development and contributes to revenue sustainability [5], [15], [24].

Overall, this discussion confirms that optimizing PNBP at Class III airports is a structural public policy challenge rather than a purely operational issue. The findings support a fiscal resilience-oriented policy model that integrates governance strengthening, revenue diversification, adaptive target-setting, and stakeholder coordination. This approach extends previous diagnostic analyzes by providing a more applicable and adaptive policy framework for improving the sustainability of non-tax state revenues at Class III airports.

CONCLUSION

This study shows that the management of Non-Tax State Revenue (PNBP) at Class III airports still faces structural issues that impact fiscal resilience. Empirical findings indicate that PNBP achievement is suboptimal, and the revenue structure is heavily dominated by passenger-based aeronautical revenue, while the contribution of non-aeronautical revenue is relatively low. This condition makes PNBP performance highly vulnerable to fluctuations in passenger numbers and changes in operational conditions. In addition to the revenue structure, the mechanism for setting PNBP targets, which relies on historical realizations, indicates limited policy adaptability in responding to external risks and shocks. Reliance on a rigid planning approach contributes to the gap between revenue targets and realization. Based on these findings, this study concludes that optimizing PNBP at Class III airports requires a policy approach oriented towards strengthening revenue governance, increasing the diversification of non-aeronautical revenue sources, and implementing risk-based target setting. This approach is expected to improve fiscal resilience and the sustainability of PNBP management at Class III airports.

Author contribution

Conceptualization: H.M; M

Methodology: M; H.M

Investigation: H.M

Analysis: H.M; R.D.K

Original Draft Preparation: H.M

Editing and Review: R.D.K; M; T.R

Visualization: R.D.K

Supervision: M

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Conflicts of interest

The authors declare there is no conflict of interest.

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