PIGGYBACK TAX: POTENTIAL FOR TAX EXTENSIFICATION THROUGH THE IMPOSITION OF MOTOR VEHICLE TAX (PKB) OPTIONS IN THE PROVINCE OF EAST NUSA TENGGARA (NTT)

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Abstract: Objective: This study aims to analyze the potential implementation of an additional motor vehicle tax (PKB) based on Law Number 1 of 2022 concerning Central and Regional Financial Relations (HKPD Law) to increase regional original revenue (PAD) for the East Nusa Tenggara (NTT) Provincial Government and Kupang City. Method: A quantitative approach was used using time-series simulations (2021–2023) and trend forecasting (2024–2029) using Microsoft Excel. Data on PKB realization, vehicle numbers, and tax rates were analyzed to model revenue under both a revenue-sharing framework (Law No. 28/2009) and an additional 66% tax burden. Results: The OPsen system significantly increased district/city regional revenue compared to the revenue-sharing system. In 2023, the OPsen contributed 39.76% (Rp 116.17 billion) to Kupang City's Regional Original Revenue (PAD), compared to 10.15% (Rp 29.67 billion) under the revenue-sharing framework. This aligns with the objectives of fiscal decentralization, namely strengthening regional tax authority while maintaining administrative efficiency. However, horizontal disparities may arise due to variations in the number of registered vehicles across regions. Implications: The OPsen mechanism enhances fiscal autonomy but requires strong public outreach to mitigate potential demand shocks from higher tax burdens. Local governments should diversify revenue streams, such as optimizing levies related to tourism and village-owned enterprises (BUMDes), to reduce overreliance on the Motor Vehicle Tax (PKB). Policymakers must balance fairness and efficiency in implementing additional levies to ensure sustainable regional fiscal health.

Keywords: Fiscal decentralization, motor vehicle tax (PKB), additional levies (Opsen), local revenue (PAD), tax simulation

Introduction

Fiscal decentralization gives authority to regional governments to manage regional government finances without relying entirely on the central government (Zhao & He, 2024); (Elezi, 2024). One form of implementing fiscal decentralization is increasing regional income. Regional income, commonly referred to as regional original income (PAD), is income originating from the innate potential of a region, which is managed and utilized by the regional government and one of the regional incomes is the application of regional taxes (Marsuni & Kamal, 2024); (Putranto et al., 2024). Law Number 1 of 2022 concerning Financial Relations Between the Central Government and Regional Governments (HKPD) states that regional taxes are mandatory contributions to the Region

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owed by individuals or entities that are coercive based on the Law, without receiving direct compensation and are used for Regional needs for the greatest prosperity of the people.

Based on data from the Directorate General of Fiscal Balance (2024), the average increase in regional tax realization in Indonesia was 8.4% in 2017-2022. Specifically, the realization of regional taxes in East Nusa Tenggara Province in 2023 was 76.04%, meaning that regional revenue through regional taxes was not optimal. Regional tax revenue indirectly reflects the condition of regional economic activity through the willingness and compliance to pay by the Community (Zimmermannova et al., 2016). This affects the amount of regional revenue that will be optimal if the realization of regional revenue through regional taxes can be maximized by increasing the percentage of tax imposition or by increasing the tax ratio by increasing taxpayer compliance. one of which is through revenue from motor vehicle tax (PKB).

The imposition of motor vehicle tax (PKB) is applied to all regions including the province of East Nusa Tenggara (NTT). Motor vehicle tax (PKB) serves as a major source of revenue for local governments and reflects the large population of motorized vehicles in Indonesia, which continues to increase every year (Ariyanti & Yasin, 2024). Through the HKPD Law, the imposition of motor vehicle tax (PKB) is classified as a provincial tax while districts/cities are classified in the form of motor vehicle tax (PKB) options. Through this regulation, a new type of tax in the form of options was introduced. Internationally, options are also known as *piggyback tax*.

Piggyback tax is a levy imposed by the government as an additional levy on a tax object (Fedelino, 2010); (Digdowiseiso, et al., 2023); (Hilmiyyah et al., 2023); (Todaro & Smith, 2020). According to Bird (2011) and Bahl & Cyan (2011), Opsen is a mechanism in which local governments set additional rates above the national taxes levied by the central authority, allowing regions to obtain additional revenue without having to manage a separate tax collection system. This is in line with the opinions of McLure Jr (2001) and Aaron & Boskin (2011) who stated that Opsen can increase fiscal flexibility for local governments while maintaining the efficiency of tax administration managed by the central government. Furthermore, (Battersby et al., 2021); Cepiku et al. (2016) stated that the implementation of Opsen helps reduce the dependence of local governments on fiscal transfers from the central government, thereby increasing fiscal accountability and responsibility at the regional level. Therefore, the Opsen rate provides a balance between regional fiscal autonomy and efficiency in tax administration (Fitriana, 2024). Tax options are an effort to extend taxes related to the expansion of taxable objects. There are three types of tax options, namely motor vehicle tax (PKB) tax options, motor vehicle transfer fee (BBNKB) tax options, and non-metallic mineral and rock tax options (MBLB) (Djpk, 2024). The purpose of using this tax option is to optimize regional revenue by shifting the revenue sharing system between the provincial and district/city governments to Regional Original Income (PAD) and will increase the role of district/city governments in collecting motor vehicle tax (PKB) with the aim of achieving strengthening *local taxing power*.

This study aims to analyze the potential for regional revenue through the PAD of the East Nusa Tenggara Provincial Government and the Kupang City Government from the implementation of the PKB tax option based on the 2022 HKPD Law which is then compared with the profit sharing system before the implementation of the 2022 HKPD Law through a revenue simulation mechanism. This study also looks at the correlation between the implementation of the PKB tax option in the Kupang City area and the increase in the Kupang City PAD. This study also provides contributions related to the description or condition of regional taxes in the form of motor vehicle taxes and motor vehicle tax options which are reviewed based on their potential revenue which is strengthened by looking at the performance of the tax revenue itself. Moreover, there is a lack of studies related to the simulation of motor vehicle tax options and profit sharing systems in the Kupang City and East Nusa Tenggara Province areas.

Formulation of the problem

Based on the background of the problem above, the formulation of the problem of this research is intended to answer the research questions below.

1. How is the fiscal impact of the opsen PKB in NTT?
2. How is the impact of the implementation of the opsen PKB on Regional Original Income (PAD) in Kupang City?

Literature review

Research on the potential for PKB (Village-Based Tax) in Cirebon Regency shows that PKB performance analysis is quite effective, even though tax effort remains very low. Simulations of the potential for PKB indicate that the PKB scheme generates 10% more revenue than the DBH scheme. The novelty of this research is the quantitative presentation of the potential for PKB schemes through mapping PKB potential as the basis for PKB and simulating revenue through the PKB and profit-sharing schemes, with Cirebon Regency as the research object (Hilmiyah dkk, 2023).

The Motor Vehicle Tax Opsen (OPSEN) initiative to increase regional revenue at the Sukabumi City Samsat (Sat Office) demonstrates that the Samsat is actively educating taxpayers, despite limited resources and outreach media. Findings indicate that the implementation of the Opsen PKB (OPSEN PKB) increased taxpayer compliance from 76.3% to 84.2% in the 2022–2024 period and contributed significantly to the growth of Regional Original Revenue (PAD) (Saputra dkk, 2025). Key success factors include transparent fund utilization, digitalized payment systems, and enhanced service quality. Additionally, the study highlights a positive correlation between improved infrastructure funded by Opsen PKB and increased taxpayer willingness to pay. Nonetheless, challenges such as database limitations, inter-agency coordination gaps, and taxpayer object mobility persist. The research emphasizes the importance of institutional strengthening, system modernization, and integrated communication strategies to further optimize tax collection.

1. *Piggyback Tax*

Fiscal decentralization, as the basis for regional financial autonomy, has become a major paradigm in global public governance reform. According to Oates (1972), fiscal decentralization allows regional governments to manage resources independently, thereby increasing the efficiency of budget allocation according to local needs. This concept was strengthened by Musgrave (1959) through public finance theory which emphasized the importance of the division of fiscal functions—allocation, distribution, and stabilization—between the central and regional governments. In the Indonesian context, Law Number 1 of 2022 concerning Central-Regional Financial Relations (HKPD) is a crucial instrument for strengthening fiscal autonomy, especially through the introduction of a tax option mechanism. Bahl and Cyan (2011) stated that effective fiscal decentralization reduces regional dependence on central transfers, in line with the objective of the HKPD Law in increasing the contribution of Regional Original Income (PAD).

Regional taxation policy, as part of fiscal decentralization, requires a strategic approach. Tax Assignment Theory (McLure, 2001) explains that taxes with a broad base, such as Motor Vehicle Tax (PKB), are more suitable to be managed by the provincial government, while additional levies (opsen) allow districts/cities to increase PAD without burdening the administrative system. Bird (2011) asserts that "piggyback tax" or tax option increases local accountability because the public can directly see the benefits of tax payments for regional infrastructure development. The study by Zimmermannova et al. (2016) in Eastern Europe strengthens this argument by showing a positive correlation between tax compliance and local economic growth, a finding that is relevant to be applied in Kupang City, where the realization of regional taxes is still not optimal. The concept of piggyback tax or tax option has been widely adopted in various countries with varying results. Fedelino (2010) defines piggyback tax as an additional levy imposed on taxes that have been set by central or provincial authorities. In the United States, states such as California have applied a surcharge to federal income taxes, which has been shown to increase revenue without increasing administrative complexity (Aaron & Boskin, 2011).

Meanwhile, in Germany, a system of "municipal surcharges" on property taxes has increased PAD by 15-20% without the need to establish a new tax authority (Büttner, 2006). This international practice is in line with the PKB option policy in Indonesia, where districts/cities have the right to collect an additional 66% of the provincial PKB, utilizing the existing tax base to strengthen regional finances. The legal framework for tax options in Indonesia is regulated through the 2022 HKPD Law and Government Regulation Number 35 of 2023. These two regulations stipulate three types of options: PKB (66%), Motor Vehicle Transfer Fee (BBNKB) (66%), and Non-Metal and Rock Mineral Tax (MBLB) (25%). Article 107 of PP 35/2023 emphasizes that the collection of PKB and BBNKB options is based on the vehicle owner's address, ensuring that revenue flows directly to districts/cities without going through a slow revenue sharing mechanism. This change reforms the previous system (Law 28/2009) which was considered to provide less incentive for districts/cities to increase PAD (Fitriana, 2024). By eliminating the revenue sharing fund distribution process, this new regulation is expected to reduce the accumulation of Budget Calculation Surplus (SiLPA) at the provincial level.

A comparison of the revenue sharing and tax option systems reveals fundamental differences in fiscal efficiency. The revenue sharing system, regulated in Law 28/2009, requires provinces to collect PKB first before distributing part of it to districts/cities. This process is often delayed due to complicated bureaucracy, causing SiLPA to accumulate in the provincial APBD (DJKP, 2024). In contrast, the option mechanism allows districts/cities to receive 66% of the PKB owed directly, increasing the certainty of regional cash flow. The study by Battersby et al. (2021) in South Africa showed that a similar system succeeded in reducing fiscal inequality between regions by 12% in five years, providing a potential picture for the implementation of the option in East Nusa Tenggara (NTT).

The effectiveness of the tax option is highly dependent on three main factors. First, taxpayer compliance, which is influenced by the transparency of the use of PAD for infrastructure development and public services (Zhao & He, 2024). Second, the administrative capacity of the local government, including training of officials and the adoption of a digital tax collection system to minimize leakage (Putranto et al., 2024). Third, regional economic activity, especially the growth of motor vehicle ownership in NTT which reaches an average of 8% per year, is a potential tax base to increase PAD (Ariyanti & Yasin, 2024). The combination of these three factors will determine the success of the implementation of the PKB option in Kupang City. In the HKPD Law Article 81 explains that there are 3 types of taxes that will be subject to surcharge, the three are Motor Vehicle Tax (PKB) surcharge, Motor Vehicle Transfer Fee (BBNKB) surcharge, and Non-Metallic Mineral and Rock Tax (MBLB) surcharge. surcharge collection will be carried out together with the tax imposed by surcharge. Later the amount of surcharge will be calculated from the amount of tax owed.

The amount of the tariff imposed for the three options based on HKPD Law Article 83 is as follows:
- PKB option of 66%
- BBNKB option of 66%
- MBLB Tax option of 25%

The amount of the Opsen will be calculated by multiplying the option rate by the amount of tax owed. Provisions regarding the mechanism for this regional tax option are further explained in Government Regulation Number 35 of 2023 concerning General Provisions for Regional Taxes and Regional Retributions. Article 107 paragraph 2 states that the PKB Opsen and BBNKB Opsen as referred to in paragraph (l) letters a and b are based on the name, population registration number, and/or address of the owner of the Motor Vehicle in the district/city area. Meanwhile, the Opsen for Non-Metallic Mineral Rock Tax will be imposed by the provincial government.

2. *Surcharge tax*

Surcharge tax can be interpreted as an additional tax imposed on top of the existing basic tax. According to Fedelino (2010), surcharge tax functions to increase government revenue without having

to change the existing tax structure. This allows the government to obtain additional revenue that can be used for various public needs, such as infrastructure, education, and health.

Surcharge tax is often applied in various contexts, including sales tax, income tax, and taxes on goods and services. For example, in some countries, surcharge tax is imposed on sales tax for certain goods, such as alcohol and tobacco, in an effort to reduce consumption of these goods while increasing government revenue (Digdowiseiso et al., 2023). The application of surcharge tax can vary depending on the fiscal policy of each region. In the context of motor vehicle tax (PKB) in Indonesia, surcharge tax can be applied as an additional tax imposed on top of the basic PKB tax. This is in line with the introduction of tax options that allow local governments to impose additional rates on top of national taxes collected by the central government (Bahl & Cyan, 2011).

The implementation of surcharge tax on PKB in East Nusa Tenggara Province can make a significant contribution to increasing PAD. With the surcharge tax, local governments can increase revenue from the motor vehicle sector, which is one of the major sources of income. This is also in line with the goal of local governments to reduce dependence on fiscal transfers from the central government (Battersby et al., 2021). Surcharge tax is an important instrument in increasing local revenue, especially in the context of fiscal decentralization. The implementation of surcharge tax on motor vehicle tax in East Nusa Tenggara Province can make a significant contribution to increasing PAD. Although there are challenges in its implementation, the benefits obtained from surcharge tax can help local governments achieve development goals and improve community welfare. Therefore, a good understanding of surcharge tax and its implementation is very important for effective and efficient regional financial management..

3. **Previous Research**

Research by Fitriana (2024) on Analysis of the Impact of Motor Vehicle Tax Collection Option on Regional Revenue explains that the implementation of Opsen increases district/city revenue in aggregate by 10.08%, but reduces provincial revenue by IDR 0.41 trillion. The city of Surabaya received the highest increase in revenue, which was 73.25%, while Pacitan experienced the deepest decline. This difference is due to the number of motor vehicles registered in each region. This has the potential to cause horizontal income inequality between regions. However, these results are in line with the objectives of fiscal decentralization, namely strengthening local taxing power. However, an appropriate cost-sharing mechanism is needed to maintain the quality of motor vehicle tax collection services and motor vehicle transfer fees. Research by Hilmiyyah et al. (2023) on Analysis of the Potential of Motor Vehicle Tax Opsen for Regional Revenue: Case Study of Cirebon Regency explains that the Opsen PKB scheme has a greater value than DBH PKB for district/city revenue. After the implementation of the HKPD Law in the 2025-2029 period, the analysis of the potential for PKB Opsen revenue is calculated to be greater than the PKB DBH revenue where the difference between the nominal option scheme is almost 10% higher than the PKB DBH revenue. Edwin Aqil Faiq (2023) regarding Analysis of Surtax Policy Formulation in the Law on Financial Relations Between the Central Government and Local Governments explains that there are various differences of opinion among stakeholders during policy formulation. However, the tax option policy brings benefits, such as providing certainty of revenue in the regions, increasing PAD in districts/cities, and encouraging synergy between levels of government. On the other hand, the MBLB tax option is used for the motive of supervising mining permits imposed at a higher level of government. However, the results of benchmarking with other countries in this study show that no country provides options at a higher level of government.

Method

The analysis method in this study uses quantitative research methods. Quantitative research methods are the process of collecting data, analyzing, and interpreting information related to the object of research and also the type of research that describes the information collected and presents the results of the study in the form of numbers (Sugiyono, 2016). The analysis carried out was by conducting a

simple simulation using the Microsoft Excel analysis tool. Through a comparison of revenues using the motor vehicle tax (PKB) sharing system between the East Nusa Tenggara Provincial Government and districts/cities and revenues sourced from the imposition of motor vehicle tax (PKB) options through the determination of a 66% rate calculated from the amount of tax owed for all types of motor vehicles through Motor Vehicle Sales Value data (NJKB).

Results and discussion

Simulasi Opsen Pajak Kendaraan Bermotor (PKB)

The analysis conducted is an analysis to see the potential for Motor Vehicle Tax (PKB) options seen using option simulations based on PKB data that has been collected by the regional government (Pemda) using old regulations, namely Law (UU) Number 28 of 2009 concerning Regional Taxes and Regional Retributions (PDRD) implemented by the Regional Government of East Nusa Tenggara Province (NTT) through Regional Regulation (Perda) of East Nusa Tenggara Province Number 2 of 2010 concerning Regional Taxes. The simulation conducted uses timeseries simulation with a time period of 2021-2023. Meanwhile, the potential data for 2024-2029 uses trend analysis to see the forecasting data for potential PKB options that have been implemented by the East Nusa Tenggara Provincial Government (NTT), namely Law (UU) Number 1 of 2022 concerning Financial Relations between the Central Government and Regional Governments (HKPD).

Table 1 Simulation of the Realization of Motor Vehicle Tax (PKB) Revenue from NTT Province in 2023 if the PKB Option is Added

	PKB profit sharing	PKB opsen	% PKB profit sharing	% PKB opsen
Provinsi	Rp.262.538.819.157	Rp.262.538.819.157	89,85%	100%
Kabupaten/Kota	Rp.29.671.163.606	Rp.116.179.872.665	10,15%	39,76%

Sumber: BPS NTT, Pergub NTT, DJPB Kanwil NTT, Tim Riset UNDANA

The results of the analysis above are simulations carried out if the PKB option is implemented in 2023 based on the implementation of Law Number 1 of 2022 concerning HKPD. The simulation calculation above uses the percentage of motor vehicle distribution in 2023 and the calculation of the PKB option adjusted to the implementation of the maximum PKB rate of 1.2% based on Law Number 1 of 2022 concerning HKPD. The maximum PKB rate of 1.2% is the tariff determination for the first vehicle while the maximum of 6% is for the second vehicle and so on. The assumption used in this calculation is that the motor vehicle calculated is the first vehicle without calculating its progressiveness. The results of the simulation calculation above explain that the implementation of profit sharing (profit sharing) according to the mandate of the old regulation, namely Law Number 28 of 2009 concerning PDRD which was implemented by the NTT Provincial Regulation through the NTT Provincial Regulation Number 2 of 2010 concerning Regional Taxes resulted in revenue for the Regency/City of 29.6 billion with a total revenue of 262.5 billion. This means that the percentage of profit sharing for the Regency/City is 10.15% of 100% of the total PKB revenue obtained. This will have an impact on the amount of regional taxes that contribute to the formation of the Regency/City's Original Regional Income (PAD).

However, if the PKB option is then applied according to the imposition of the PKB option rate of 66%, then the contribution that can be obtained by the Regency/City is 116.17 billion with the percentage of PKB options for the Regency/City being 39.76% of the total PKB revenue that can be generated. The following are the timeseries summation results for PKB profit sharing and PKB options for 2021-2023 using data obtained based on the Regulation of the Governor of East Nusa Tenggara Province and the Directorate General of Treasury of the East Nusa Tenggara Representative Office.

Table 2 Comparison Simulation of Motor Vehicle Tax (PKB) Revenue Realization Using Revenue Sharing Fund Option and Regency/City PKB in East Nusa Tenggara Province in 2021-2023

Tahun	Kabupaten/Kota	Jumlah kendaraan bermotor	PKB profit sharing (Pergub NTT)	Simulasi PKB opsen
2021	Kota Kupang	240.356	13.268.566.288	40.271.620.822
	Kabupaten Kupang	57.570	3.502.521.282	9.645.847.038
	Kabupaten Sabu Raijua	7.060	1.767.591.923	1.182.902.208
	Kabupaten Rote Ndao	14.470	1.998.828.856	2.424.446.876
	Kabupaten TTS	55.391	3.427.164.718	9.280.755.833
	Kabupaten TTU	41.235	2.892.471.815	6.908.919.622
	Kabupaten Belu	46.458	3.600.288.561	7.784.032.685
	Kabupaten Alor	22.497	2.203.385.837	3.769.369.825
	Kabupaten Flores Timur	35.561	2.391.789.573	5.958.241.559
	Kabupaten Lembata	21.422	2.141.501.436	3.589.253.696
	Kabupaten Sikka	57.059	3.589.389.089	9.560.229.046
	Kabupaten Ende	47.293	3.191.007.706	7.923.936.842
	Kabupaten Ngada	23.460	2.354.918.193	3.930.720.367
	Kabupaten Nagekeo	18.260	2.122.652.280	3.059.460.950
	Kabupaten Manggarai	50.105	3.514.952.280	8.395.087.126
	Kabupaten Manggarai Barat	32.516	2.278.714.185	5.448.052.150
	Kabupaten Manggarai Timur	22.856	2.716.597.299	3.829.520.235
	Kabupaten Sumba Timur	36.395	3.119.726.234	6.097.978.165
	Kabupaten Sumba Barat	13.214	2.197.358.796	2.214.004.217
	Kabupaten Sumba Barat Daya	15.494	2.118.136.270	2.596.017.961
	Kabupaten Sumba Tengah	3.904	1.705.120.004	654.114.762
	Kabupaten Malaka	23.990	2.284.478.002	4.019.521.807
	Provinsi Nusa Tenggara Timur	**886.566**	**305.223.591.028**	**305.223.591.028**
2022	Kota Kupang	251.400	43.405.440.745	62.356.146.646

	Kabupaten Kupang	61.477	5.050.056.172	15.248.483.800
	Kabupaten Sabu Raijua	7.527	2.333.210.132	1.866.963.866
	Kabupaten Rote Ndao	15.084	2.641.127.133	3.741.368.799
	Kabupaten TTS	58.511	4.894.174.619	14.512.810.248
	Kabupaten TTU	43.705	4.123.550.679	10.840.395.343
	Kabupaten Belu	48.713	4.963.170.057	12.082.557.564
	Kabupaten Alor	23.261	3.031.104.584	5.769.555.796
	Kabupaten Flores Timur	37.405	3.297.277.638	9.277.771.143
	Kabupaten Lembata	22.213	2.982.193.434	5.509.614.501
	Kabupaten Sikka	59.801	5.634.264.718	14.832.776.156
	Kabupaten Ende	49.331	4.799.570.150	12.235.843.557
	Kabupaten Ngada	24.161	3.305.893.590	5.992.787.825
	Kabupaten Nagekeo	18.790	3.006.150.559	4.660.588.685
	Kabupaten Manggarai	51.338	5.393.755.258	12.733.650.981
	Kabupaten Manggarai Barat	34.011	4.046.723.782	8.435.938.359
	Kabupaten Manggarai Timur	24.092	3.417.777.030	5.975.673.369
	Kabupaten Sumba Timur	38.980	4.112.122.917	9.668.427.193
	Kabupaten Sumba Barat	13.630	2.911.996.974	3.380.725.055
	Kabupaten Sumba Barat Daya	16.226	2.915.642.507	4.024.625.439
	Kabupaten Sumba Tengah	4.067	2.368.634.971	1.008.760.734
	Kabupaten Malaka	25.190	2.987.659.707	6.248.016.444
	Provinsi Nusa Tenggara Timur	**928.913**	**457.878.168.236**	**457.878.168.236**
2023	Kota Kupang	264.468	4.944.574.685	31.317.604.705
	Kabupaten Kupang	65.737	1.603.444.922	7.784.402.576
	Kabupaten Sabu Raijua	7.819	760.126.292	925.905.407
	Kabupaten Rote Ndao	16.790	917.282.837	1.988.227.623
	Kabupaten TTS	62.831	1.528.091.300	7.440.281.702
	Kabupaten TTU	46.114	1.330.422.632	5.460.698.547

Kabupaten Belu	52.172	1.606.217.229	6.178.070.968
Kabupaten Alor	24.383	931.019.238	2.887.370.705
Kabupaten Flores Timur	38.540	1.082.053.921	4.563.805.395
Kabupaten Lembata	22.856	934.816.027	2.706.547.382
Kabupaten Sikka	62.958	1.577.290.009	7.455.320.708
Kabupaten Ende	50.448	1.452.011.100	5.973.919.424
Kabupaten Ngada	25.460	1.087.895.030	3.014.906.211
Kabupaten Nagekeo	19.548	961.772.424	2.314.822.726
Kabupaten Manggarai	55.469	1.631.380.631	6.568.493.033
Kabupaten Manggarai Barat	37.807	1.252.418.504	4.477.005.464
Kabupaten Manggarai Timur	24.680	1.050.426.364	2.922.540.663
Kabupaten Sumba Timur	39.143	1.351.303.158	4.635.211.069
Kabupaten Sumba Barat	14.296	964.614.876	1.692.894.705
Kabupaten Sumba Barat Daya	17.093	954.818.199	2.024.108.086
Kabupaten Sumba Tengah	4.215	745.916.636	499.129.210
Kabupaten Malaka	28.278	1.003.267.592	3.348.606.356
Provinsi Nusa Tenggara Timur	**981.105**	**262.538.819.157**	**262.538.819.157**

Sumber: BPS NTT, Pergub NTT, DJPB Kanwil NTT, Tim Riset UNDANA

The results of the analysis in the table above are the results of a simulation if the PKB option is implemented and its comparison to the PKB profit sharing. The results above show that the amount that will be received by the Regency/City if using the PKB option is greater than the profit sharing that will be received using the NTT Provincial Governor Regulation (NTT Pergub). So that in terms of analysis, the implementation of the PKB option through the implementation of the HKPD Law in 2025 will provide additional revenue for regional taxes and Regional Original Income (PAD) of the Province and Regency/City. With the large number of motorized vehicles in the province of East Nusa Tenggara, if the PKB option is implemented, it is certain that the amount of revenue from Motor Vehicle Tax will increase.

From the results of the PKB projection in NTT, it can be implemented 100% in PKB withdrawal because it has been stated in Law No. 1 of 2022 concerning Financial Relations Between the Central Government and Regional Governments.

PKB Piggyback Tax Discussion

Simulation of Motor Vehicle Tax (PKB) is done with the assumption that the PKB option has been implemented. So the calculation is done to see the comparison of two different types of PKB

collection, profit sharing and PKB option. Based on the results of the previous analysis, the PKB option value is greater than the profit sharing to the Regency/City. This is because the amount of PKB that was previously paid is entirely a source of income for the East Nusa Tenggara (NTT) Provincial Government, while the Regency/City Government gets results by setting a PKB option rate of 66% of the PKB owed. This means that there is an additional imposition on PKB that must be paid by the community. This will provide a large source of income for regional taxes which will contribute greatly to the formation of Regional Original Income (PAD). These results are in line with research (Hilmiyyah et al., 2023); (Fitriana, 2024).

Piggyback tax scheme has three characteristics.

- The regional government has the authority to determine the amount of the option tariff, but does not exceed the maximum limit set by the central government.
- The regional government does not have the authority to determine the option tax base, but rather follows the option tax base.
- The administration of option collection remains carried out by the central government, so there are no additional administration costs for the regional government or Taxpayers.

This scheme can also be referred to as overlapping tax, namely a tax with the same (or nearly the same) tax base for various levels of government, but with the right of each level of government to set its own tax rate on that tax base.

The implementation of the PKB option scheme in the East Nusa Tenggara (NTT) Province, one of which refers to the opinion of the Head of the NTT Province Regional Revenue Agency (Bapenda) through the enactment of the East Nusa Tenggara Province Regional Regulation (Perda) Number 1 of 2024 concerning Regional Taxes and Regional Retributions. The Perda issued is part of the derivative regulations resulting from the issuance of Law (UU) Number 1 of 2022 concerning Financial Relations between the Central Government and Regional Governments (HKPD).

From the results of the PKB revenue projections in NTT Province, it is predicted that taxpayer compliance will be low in paying taxes, but for the next few years, taxpayer compliance will increase, which will have an impact on PKB revenue.

Conclusions

The previous results and discussions provide several conclusions, namely::
- The simulation results show that the implementation of Opsen PKB provides added value to regional revenue through regional taxes on Regional Original Income (PAD).
- The percentage increase in PKB to the implementation of Opsen PKB is 39.76% and is greater than the implementation of the profit sharing scheme, which is only 10.15%.
- The Opsen PKB scheme carried out by the East Nusa Tenggara (NTT) Provincial Government through the issuance of derivative regulations, namely the Regional Regulation (Perda) of the East Nusa Tenggara Province Number 1 of 2024 concerning Regional Taxes and Regional Retributions is an additional imposition due to the determination of the Opsen PKB rate of 66% of the PKB owed.

Recommendation
- In-depth socialization is needed to the community regarding the implementation of the HKPD Law and NTT Provincial Regulation Number 1 of 2024 concerning PDRD because there is an additional imposition on PKB collected due to the determination of the PKB Opsen tariff of 66%. This can create a demand shock effect from the community due to the additional allocation that must be made for tax payments in the form of PKB.
- Planning is needed for regional revenue projections that do not come from regional taxes, for example through regional levies. Levies that can be optimized can be done through data collection on retribution objects, one of which is tourist attractions that have not been

optimized by the local government and have not been evaluated to determine standard costs for entrance tickets, parking and so on, including the establishment of Village-Owned Enterprises (BUMDes) as a management medium on a micro scale.

- The provincial government needs to release and update the latest data related to PKB options.

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