



Article info : *Received* : Feb 2026 ; *Revised* : March 2026 ; *Accepted* : April 2026

Potential Revenue and Effectiveness of Motor Vehicle Tax as Original Revenue Case Study in East Java Province

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Abstract. This study aims to analyze the revenue potential and effectiveness of Motor Vehicle Tax collection as a source of Regional Original Revenue in East Java Province during the 2021–2024 period. The research employs a descriptive quantitative approach using secondary data obtained from the East Java Regional Revenue Agency (Bapenda), Regional Government Financial Reports, and Regional Budget Realization Reports. Revenue potential was analyzed through annual growth trends, while effectiveness was measured using the ratio between realized revenue and targeted revenue. The findings indicate that Motor Vehicle Tax revenue consistently increased from IDR 6.87 trillion in 2021 to IDR 9.25 trillion in 2024, with annual growth averaging approximately 9%. Furthermore, the effectiveness ratio remained above 100% throughout the observation period, ranging from 107.41% to 113.45%, indicating a very effective level of tax collection. The highest effectiveness was achieved in 2024, reflecting improved taxpayer compliance, digitalization of tax administration services, and the implementation of tax incentive policies by the provincial government. These results demonstrate that Motor Vehicle Tax has substantial potential and continues to make a significant contribution to Regional Original Revenue in East Java Province. The study recommends strengthening tax administration, improving taxpayer databases, expanding digital payment services, and enhancing public awareness to ensure sustainable growth in regional tax revenue.

Keywords: Motor Vehicle Tax; Regional Original Revenue; Tax Effectiveness

A. INTRODUCTION

Regional revenue plays a fundamental role as a fundamental pillar in assessing the fiscal capacity of provincial governments to provide public services, fund infrastructure development, and support social welfare initiatives. Within the framework of regional autonomy, increasing Regional Original Revenue (PAD) is crucial to indicate regional fiscal independence in meeting its development needs. One of the vital contributors of PAD is the motor vehicle tax (PKB), considering its wide scope of tax objects, significant taxpayer volume, and its close relationship with economic activities and community movements (Ministry of Finance of the Republic of Indonesia, 2020).

For local governments, taxes have two main functions: as a source of state funding (budget function) and as a regulatory instrument (regulatory function). Taxes serve as a source of revenue for local governments, which are allocated to fund various expenses, both routine and developmental. This funding includes the provision of infrastructure, education and health services, and other public goods that cannot be met by the private sector. In addition, taxes also play a role as a policy instrument in managing social and economic aspects. Thus, taxes have a significant contribution to the development process of a region (Siahaan, 2010).

Pajak daerah merupakan salah satu komponen Pendapatan Asli Daerah (PAD). Di Provinsi Jawa Timur, sektor Pajak Kendaraan Bermotor menunjukkan potensi sebagai sumber PAD yang strategis, dengan tren peningkatan pendapatan dari sektor ini yang konsisten setiap tahunnya. Secara mendasar, Pajak Kendaraan Bermotor merupakan salah satu jenis pajak yang dikelola oleh pemerintah daerah. Mekanisme pemungutannya melibatkan pihak ketiga, yaitu SAMSAT, yang bertugas memungut Pajak Kendaraan Bermotor sebelum menyetorkannya kepada Pemerintah East Java Province. East Java Province's Motor Vehicle Tax revenue consistently shows an increase every year, often even exceeding the set target. In the implementation of the Motor Vehicle Tax, the Regional Government of East Java Province, through the Regional Finance Agency, supervises the collection process. However, in the aspect of managing its tax collection, the Regional Revenue Office collaborates with SAMSAT. SAMSAT has an obligation to receive the payment of Motor Vehicle Tax and deposit it into the Regional Treasury.

The Motor Vehicle Tax (PKB) shows characteristics that make it a potential source of revenue for the provincial government. The continuous increase in the number of motor vehicles opens up opportunities for increased revenue, especially if supported by regular administrative management and high taxpayer awareness. However, the realization of this potential is not always optimal because it is influenced by various factors, including service quality, supervisory effectiveness, and the capacity of local governments to accurately manage vehicle data (Organisation for Economic Co-operation and Development [OECD], 2019).

Theoretically, potential regional tax revenue can be interpreted as the amount of revenue that can be collected economically and administratively, based on the tax object, the rate set, and the level of compliance of taxpayers. Therefore, the amount of potential Motor Vehicle Tax (PKB) in an area does not solely depend on the number of registered vehicles, but also on the effectiveness of the collection system in converting this potential into actual revenue. Analysis of the potential for PKB revenue is crucial so that local governments can identify revenue opportunities that have not been utilized optimally (OECD, 2019).

East Java Province is characterized by a high level of population mobility and a significant increase in the number of motor vehicles. Theoretically, this condition should result in substantial potential PKB revenues. However, the high number of vehicles does not necessarily guarantee the realization of high revenue if there are still tax arrears, changes in vehicle domicile, or other administrative obstacles. Thus, the study of the potential for PKB revenue in East Java is very relevant to evaluate the suitability between actual revenue and existing fiscal capacity.

In addition to its potential, the ability to collect Motor Vehicle Tax (PKB) is a crucial factor that needs to be examined. This ability indicates the capacity of local governments to transform tax potential into real gains through an effective, directed, and sustainable collection system. A number of variables can affect this level of ability, including the adoption of digital technology in SAMSAT services, data harmonization between institutions, the provision of incentives, and the competence of the collection implementation apparatus. Therefore, the ability to collect PKB not only reflects revenue performance, but also the capabilities of regional tax administration (World Bank, 2020).

The 2021–2024 period is a relevant period to be analyzed, considering that this period includes economic revival, shifts in taxpayer behavior, and modifications to public service policies at the regional level. During this time frame, local governments faced challenges to optimize revenue generation while still paying attention to the ease of service and community legal compliance. The potential gap between the number of registered vehicles and the realization of Motor Vehicle Tax (PKB) revenues indicates that the addition of tax objects does not necessarily increase Regional Original Revenue (PAD) without an efficient administrative system.

Therefore, a study on the potential revenue and effectiveness of motor vehicle tax collection as a source of Regional Original Revenue in East Java Province during the 2021–2024 period is crucial. This research is expected to present a comprehensive understanding of the magnitude of PKB's potential, its tax collection efficiency, and elements that have an impact on achieving regional revenue targets. In addition, the findings of this study are expected to be substantial input for local governments in designing more accurate and sustainable PAD optimization strategies.

The procedure for collecting information in an investigation plays a crucial role in determining the results of the research. Determining appropriate procedures will produce precise, relevant, and valid information so that research goals can be realized. Information is a collection of data needed for the policy determination process (Kuncoro, 2014). The type of information used in this study includes quantitative data in the form of records of Motor Vehicle Tax revenues, realization of East Java Province's Regional Original Revenue for the 2021–2024 period. Data access was obtained from the portal of the Ministry of Finance of the Republic of Indonesia in djpk.kemenkeu.go.id, as well as through interview sessions with representatives of the East Java Provincial Finance Agency (BKD). To measure the achievement of the tax revenue target, the study also included observations of documents and other relevant data to support this study.

B. LITERATURE REVIEW

Regional Autonomy and Fiscal Decentralization

Law Number 33 of 2004 concerning the Financial Balance between the Central Government and the Regional Government emphasizes that in the context of the implementation of regional autonomy and fiscal decentralization, local governments are given the flexibility to manage and utilize their sources of regional revenue in accordance with the aspirations of the local community. To carry out regional autonomy in a broad, real, and responsible manner, the regions need to have the authority and ability to explore their own financial resources. Therefore, local governments are required to be able to increase regional revenues so that government functions and public services can run effectively and efficiently.

Definition of Tax

According to Law Number 16 of 2009 concerning the fourth amendment to Law Number 6 of 1983 concerning General Provisions and Tax Procedures, tax is a mandatory contribution to the state owed by individuals or entities, is coercive based on law, without direct compensation, and is used for state purposes for the greatest prosperity of the people. Taxes are the main instrument in financing national and regional development because they are a sustainable source of funding.

Definition of Regional Taxes

Regional taxes are mandatory contributions to the region owed by individuals or entities, are coercive based on the law, without direct compensation, and are used for regional purposes for the greatest possible prosperity of the people. Regional taxes are one of the important sources of Regional Original Revenue (PAD) because the results of its collection are used to finance the implementation of local government and regional development.

Procedures for Collecting Regional Taxes

Regional tax collection is basically carried out based on applicable provisions and can be carried out through several systems, depending on the type of tax. One of the systems used is the official assessment system, which is a tax collection system where the amount of tax is determined by the local government, then the taxpayer pays after receiving a tax determination letter or other official documents.

In addition, there is a self-assessment system, which is a tax collection system that gives taxpayers the authority to calculate, pay, and report the taxes owed themselves. In practice, these two systems are used according to the characteristics of the type of regional tax collected.

Definition of Motor Vehicle Tax

Motor Vehicle Tax (PKB) is a tax on the ownership and/or control of motor vehicles. Based on Law Number 28 of 2009, motor vehicles are all wheeled vehicles and their couplings that are used on all types of roads and are driven by engineering equipment in the form of motors or other equipment that functions to convert energy resources into motion power.

The object of PKB includes motor vehicles such as motorcycles, cars, buses, trucks, as well as heavy equipment and large tools that use wheels and motorcycles. However, there are several exceptions, including trains, vehicles for national defense and security, foreign embassy or consulate vehicles, renewable energy-based vehicles, and vehicles sealed, confiscated, or frozen by the state.

Legal Basis of Motor Vehicle Tax in East Java

In the implementation of PKB collection in East Java Province, local governments are guided by various regional regulations, governor regulations, and governor decrees that regulate the basis for tax imposition, tariffs, and tax relief policies. The regulation is the basis for determining the amount of PKB that must be paid by taxpayers.

East Java Governor Regulation Number 40 of 2024 concerning the Basis for the Imposition of Motor Vehicle Tax, Motor Vehicle Name Return Duty, and Heavy Equipment Tax in 2024.

Decree of the Governor of East Java Number 100.3.3.1/722/KPTS/013/2024 concerning the provision of basic relief for the imposition of PKB and BBNKB.

Potential Tax Revenue

Potential is an ability that can still be developed into something bigger. In the context of taxation, potential tax revenue is the amount of revenue that can theoretically be obtained if all taxpayers fulfill their tax obligations in full and on time.

These factors greatly determine the size and size of the potential for PKB revenue in a region. The larger the number of vehicles and the higher the taxpayer's compliance, the greater the potential for revenue that can be realized.

Effectiveness of Motor Vehicle Tax Revenue

Tax collection effectiveness is a measure that shows the extent to which the target or potential tax revenue can be achieved by the local government. In this study, the effectiveness of PKB can be interpreted as a comparison between the realization of PKB revenue and the target or potential revenue that has been set.

This effectiveness is influenced by various factors, such as the quality of SAMSAT services, the ease of tax payment, the integration of data between institutions, and the level of public awareness in paying taxes.

Regional Original Revenue

Regional Original Revenue is regional revenue obtained from sources within its own territory, including regional taxes, regional levies, the results of segregated regional wealth management, and other legitimate local revenues. PAD is an important indicator in assessing regional fiscal independence because it shows the ability of regions to finance development needs without relying too much on central government transfers.

In increasing PAD, local governments are not allowed to set revenue policies that incur high economic costs or that hinder population mobility, traffic of goods and services between regions, and export-import activities. Therefore, PAD optimization needs to be carried out while still paying attention to the principles of efficiency, justice, and sustainability.

C. RESEARCH METHODOLOGY

Research basically aims to prove the truth and solve problems. This study uses a qualitative approach and uses causal relationships as a form of explanation. Causal relationships are defined as causal relationships (Sugiyono, 2018). This means that the focus of the research is on how the potential revenue of motor vehicle taxes and its effectiveness on local original revenues in East Java Province.

This research was conducted by searching and collecting data on Motor Vehicle Tax in East Java Province. Research object is Motor Vehicle Tax in East Java Province is the object of this research.

This study uses quantitative data. According to Sugiyono (2018), quantitative research is based on positivism and is used to study certain populations or samples. This method collects data using research instruments and analyzes the data quantitatively or statistically to test the hypotheses that have been made.

The data studied is primary data, or primery data, taken directly from the Regional Finance Agency (BKD) of East Java Province. In addition, this data is also accessed from the websites of the ministry of finance, djpk.kemenkeu.go.id, and from library studies and research institutes.

This research uses qualitative methods to collect the necessary data and information. This study uses field studies and library studies as well as various sources from East Java Province. To process the data, this study uses data analysts from djpk.kemenkeu.go.id and various sources

One of the research activities is data analysis, which includes the preparation and processing of data to provide an understanding of the data collected. For research data, the author conducted field studies and library studies and interviews with motorcycle users. The following are the steps of the research carried out:

(1) Data is collected through data downloads to djpk.kemenkeu.go.id and other sources. (2) Data collection techniques: Tools used to collect data from the components to be processed and then analyzed and conclusions are drawn.

This research method is carried out in three stages. First, the author conducts a literature study by looking for primary and secondary sources, classifying them based on the research formula, and processing the data. The second stage is a field study, by preparing research design and testing, and determining the research location. The third stage displays data, data abstraction and interpretation and as well as conclusions. The output target of this study is in the form of a Report on the Results of Potential Revenue and Effectiveness of Motor Vehicle Tax as Original Revenue of Case Study Areas in East Java Province.

The method of data collection in the study has a great influence on the results of the study. Choosing the right method will allow for the collection of precise, relevant, and accurate data to achieve the research objectives. According to Kuncoro (2014), data is a collection of information needed for decision-making. This study uses quantitative data from motor vehicle tax collection, East Java Provincial Original Revenue revenue, and data for 2021–2024.

D. RESULTS AND DISCUSSION

In the case of East Java, high PAD helps provincial governments maintain public spending, infrastructure development, and public services. Although PAD in East Java has comparable performance, there are still problems optimizing it. These issues are typically related to taxpayer compliance, collection efficiency, data quality of tax objects, and revenue oversight. Therefore, the increase in PAD depends on the performance of administration and fiscal policies as well as the economic potential of the region.

According to this overview, East Java is a province with a large and ever-increasing PAD; However, the regional tax sector still needs to be strengthened to make its fiscal capacity more independent. Therefore, it is very important to conduct research on local taxes, including motor vehicle taxes, to assess the most likely sources of revenue.

Motor Vehicle Tax is highly dependent on the amount of tax collected by SAMSAT; The amount of tax depends on the ability of electricity customers, the number of electricity customers other than those generated by SAMSAT, and the level of collectibility of SAMSAT. Because SAMSAT is the largest contributor to regional taxes, motor vehicle tax management must be done properly.

The following table shows the Number of Motor Vehicles in East Java Province 2021 – 2024

**Table 1. Number of Motorized Vehicles in East Java Province
Year 2021 – 2024**

Year	Number of Vehicles	Rise
2020	19.476.691	
2021	22.001.528	2.524.837
2022	23.217.845	1.216.317
2023	24.126.372	908.527
2024	25.959.164	1.832.792

Source: various sources of East Java Province report

From table 1.above, it can be concluded that the growth rate declined after a big surge in 2021, reaching its lowest point in 2023, then increasing again in 2024. This indicates a recovery of accelerated growth after the 2022–2023 slowdown.

Total contribution (2020→2024): A total addition of 6,482,473 vehicles over four years (from 19,476,691 to 25,959,164), an average increase of ~1,620,618 per year.

**Table 2. Realization of Regional Revenue in East Java Province
Year 2021 – 2024**

Year	Realization of PAD	Rise	%
2020	17.948.227.651.429		
2021	18.935.885.925.145	987.658.273.716	105,50%
2022	21.258.851.207.715	2.322.965.282.570	112,27%
2023	22.317.204.435.685	1.058.353.227.970	104,98%
2024	22.454.697.630.042	137.493.194.357	100,62%

Source: various sources of East Java Province report

From table 2. above it can be concluded that East Java Provincial Revenue □ 2021 (5.50%): moderate recovery after 2020; The absolute increase of ~0.99 trillion indicates an improvement in revenue but is still relatively small.

□ 2022 (12,27%): the largest jump in this period, an absolute increase of ~2,32 trillion; It is likely to be caused by a post-pandemic recovery in economic activity, increased tax compliance/levy policy engineering, or an increase in a certain tax base.

□ 2023 (4.98%): growth slowed again, an increase of ~1.06 trillion; Still positive but far below the peak of 2022.

□ 2024 (0.62%): almost stagnant — increase of only ~0.14 trillion; This shows worrying acceptance conditions when compared to the 2021–2022 trend.

The slowdown in the growth of East Java Province's Regional Original Revenue (PAD) in 2023 and 2024 shows that the region's ability to increase revenue is not as fast as in the previous period. In 2022, PAD is still able to grow relatively high, but in 2023 the growth rate will decline and in 2024 it will be almost stagnant. This condition indicates a weakening of the regional revenue base, both in terms of economic activity and in terms of collection intensity.

One of the main factors is the slowdown of East Java's economy. When driving sectors such as the processing industry, trade, and household consumption grow more slowly, economic transactions that are the basis for regional tax collection also weaken. As a result, the space for increasing regional taxes, regional levies, and other PAD sources has become more limited than in previous years.

In addition, in 2024 the very small growth of PAD shows that regions are beginning to face the condition of *diminishing return* on revenue, that is, the increase in income is no longer as large as when the economic recovery is still strong. This could be because the tax base has approached its short-term optimal potential, while the addition of new revenues has not been strong enough to drive higher growth.

Thus, the slowdown in PAD in 2023 and 2024 can be understood as a combination of weakening regional economic performance and limited expansion of regional revenue sources. The implication is that local governments need to strengthen the intensification and extensification of PAD, for example through improving taxpayer compliance, digitizing collection, optimizing regional assets, and diversifying revenue sources so that PAD growth is more stable in the future.

E. CONCLUSIONS AND SUGGESTIONS

Based on the description and discussion that has been stated previously, the author can draw the following conclusions:

From 2021 – 2024 in general, this table shows that PKB experienced a positive and fairly stable growth trend during 2021–2024. Although the pace of growth slowed slightly after 2022, nominal receipts continued to increase every year. This confirms that PKB is one of the relatively strong sources of regional income and has the potential to continue to be optimized.

The effectiveness of the East Java Provincial Motor Vehicle Tax in 2021-2024 is classified as very effective. This is evidenced by the percentage effectiveness value that is always above 100% and tends to increase every year. The highest increase occurred in 2024 with an effectiveness of 113.45%, so that this year will be the period with the best performance in achieving the PKB revenue target.

Thus, PKB is one of the sources of regional income that has great potential and is able to make a strong contribution to regional revenue. This success shows that PKB management has gone quite well, although there is still room to improve target planning to be more accurate and in line with real potential.

Suggestions

Motor Vehicle Tax Revenue, local governments need to strengthen the intensification of collection through increasing taxpayer compliance, supervision of vehicles that have not been re-registered, and regular updating of tax object data. In addition, the digitization of payment services and the expansion of service channels need to be continuously developed so that the payment process becomes easier, faster, and more efficient. Local governments also need to increase socialization to the public about the importance of paying taxes on time and its benefits for regional development. Thus, Motor Vehicle Tax revenues are expected to continue to grow sustainably and become one of the more optimal sources of regional revenue.

Effectiveness of Motor Vehicle Tax, local governments are advised to set revenue targets based on analysis of historical trends, the development of the number of vehicles, the level of taxpayer compliance, and regional economic conditions so that the targets prepared are more realistic and accurate. In addition, it is necessary to strengthen the taxpayer database through regular data updates so that potential revenues can be calculated more accurately and tax leakage can be minimized. Local governments also need to optimize supervision and enforcement of delinquent vehicles, expand the digitization of payment services, and increase socialization to the public so that taxpayer compliance is better. Thus, the effectiveness of Motor Vehicle Tax revenue not only remains in the very effective category, but is also able to reflect more optimal and sustainable tax management.

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