



**THE INFLUENCE OF MODERN ADMINISTRATIVE SYSTEMS AND TAX  
SANCTIONS ON MOTOR VEHICLE TAXPAYER COMPLIANCE (A Case Study of  
Taxpayers at SAMSAT Serpong in 2023)**

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***ABSTRACT***

*This study aims to analyze the influence of the modern administrative system and tax sanctions on the compliance of motor vehicle taxpayers at SAMSAT Serpong (case study of taxpayers in 2023). This research uses a quantitative approach, with data collected through digital questionnaires or barcodes distributed directly to motor vehicle taxpayers at SAMSAT Serpong. The sampling technique used is associative sampling, which aims to determine the influence of certain variables on other variables both simultaneously and partially. The study analyzed primary data from 103 respondents using multiple linear regression analysis. The results show that the implementation of an integrated modern administrative system, which facilitates payments through various methods both cash and non-cash, has a positive influence on increasing taxpayer compliance. In addition, strict tax sanctions have also proven to be effective in encouraging taxpayers to fulfill their tax obligations, as evidenced by hypothesis testing results which show a significant influence on motor vehicle taxpayer compliance.*

*Keywords: Modern Administrative System, Tax Sanctions, Taxpayer Compliance*

## Introduction

Local tax revenues play a crucial role in driving economic growth and development, particularly through Regional Original Revenue (PAD). One of the major sources of PAD is the Motor Vehicle Tax (PKB), whose collection is highly dependent on taxpayer compliance. Despite the rising number of motor vehicles due to increasing urban mobility and societal needs, the compliance rate among taxpayers remains relatively low. This issue is evident from the consistently high percentage of unexpired vehicle registrations (KTMDU), which has exceeded 40% annually at the SAMSAT Serpong office from 2019 to 2023. This situation underscores the importance of implementing an effective tax administration system and enforcing strict tax penalties to raise taxpayer awareness and compliance.

Efforts to improve administrative efficiency include the implementation of modern administrative systems through SAMSAT, such as e-SAMSAT, drive-thru services, mobile SAMSAT units, and app-based payment methods (Firda Apriani et al., 2024). These innovations aim to enhance service convenience and are expected to positively influence taxpayer behavior in fulfilling their obligations. Legally, the implementation of modern tax administration systems and the imposition of sanctions are regulated through various legal instruments, such as Law Number 28 of 2009, Presidential Regulation No. 5 of 2015, and their operational guidelines stipulated in a joint decree between the National Police, Ministry of Home Affairs, and PT. Jasa Raharja. These regulations strengthen the legal foundation for imposing tax sanctions as a deterrent for non-compliant taxpayers and to ensure legal compliance.

The theoretical framework of this study is based on Agency Theory and Attribution Theory. Agency Theory explains the relationship between the government as the principal and taxpayers as agents in fulfilling tax obligations (Munawir, 2002). Meanwhile, Attribution Theory is used to analyze taxpayer behavior based on internal and external factors, such as knowledge and perceptions of the tax system (Susanti, 2018). Previous studies by Pratiwi & Irawan (2019) and Yusuf Chusaeri et al. (2017) found that modern administrative systems and tax sanctions significantly influence motor vehicle taxpayer compliance. However, these studies were conducted in different regions such as Cimareme, South Jakarta, and South Medan. One major limitation of these studies is the lack of focus on the dynamics in South Tangerang, particularly at the SAMSAT Serpong office, which features distinct socio-economic conditions and a different volume of motor vehicles.

The novelty of this research lies in its scope and period, focusing on recent developments in 2023, along with the rise of digital service innovations at SAMSAT Serpong. Using primary data from 103 respondents, this study fills an empirical gap in the South Tangerang area. It examines the influence of each variable both individually and simultaneously, providing a comprehensive overview of the effectiveness of local tax policies. Thus, the urgency of this research stems not only from its academic contribution but also from its practical relevance to policymakers in regional taxation. This study could serve as a basis for formulating strategies to enhance PAD through the optimization of modern tax administration systems and effective enforcement of sanctions.

## Theoretical Background

Local tax revenue plays a crucial role in driving economic growth and development, particularly through Regional Original Revenue (PAD). One of the most significant sources of PAD is the Motor Vehicle Tax (PKB), the collection of which largely depends on taxpayer compliance. Despite the growing number of motor vehicles due to increasing mobility and urban demands, the level of taxpayer compliance remains relatively low. This issue is evident from the high percentage of vehicles failing to re-register (KTMDU), as recorded by SAMSAT Serpong during the 2019–2023 period, where violation rates consistently exceeded 40% each year. This condition highlights the urgent need for an effective taxation system and strict tax penalties to raise awareness and foster taxpayer compliance.

One administrative improvement effort involves implementing a modern administrative system through SAMSAT, including e-SAMSAT, drive-thru services, mobile SAMSAT, and app-based payment options (Firda Apriani et al., 2024). These innovations are expected to enhance service convenience and directly influence taxpayer behavior in fulfilling their tax obligations. From a legal standpoint, the implementation of modern tax administration systems and the enforcement of penalties

are governed by various regulations, such as Law Number 28 of 2009, Presidential Regulation No. 5 of 2015, and their implementing provisions as stated in a joint decree among the National Police, Ministry of Home Affairs, and PT. Jasa Raharja. These regulations serve to strengthen the legal basis for imposing tax sanctions as a deterrent for non-compliance and ensure lawful adherence by taxpayers.

The theoretical foundation of this study draws upon Agency Theory and Attribution Theory. Agency Theory is used to explain the relationship between the government as the principal and taxpayers as agents in fulfilling their tax obligations (Munawir, 2002). Attribution Theory, on the other hand, explores taxpayer behavior based on both internal and external factors such as knowledge and perceptions of the tax system (Susanti, 2018). Previous studies, such as those by Pratiwi & Irawan (2019) and Yusuf Chusaeri et al. (2017), found that both modern administrative systems and tax sanctions significantly affect compliance among motor vehicle taxpayers. However, these studies were conducted in different locations, such as Cimareme, South Jakarta, and South Medan. A notable limitation of these studies is their lack of focus on the specific dynamics in South Tangerang, particularly at SAMSAT Serpong, which features unique socio-economic conditions and motor vehicle volume.

This study presents a novel contribution through its specific focus on the 2023 period and the growing digital service innovations at SAMSAT Serpong. By utilizing primary data from 103 respondents, it addresses the empirical research gap in South Tangerang. Furthermore, the study investigates the influence of each variable not only partially but also simultaneously, offering a comprehensive view of the effectiveness of local tax policy. Therefore, the urgency of this research lies not only in its academic contribution but also in its practical relevance for policymakers in regional taxation. This research can serve as a strategic foundation for increasing PAD through the optimization of modern tax administration systems and the effective enforcement of sanctions.

## **Method**

This research employs a quantitative method with an associative approach, which aims to determine the relationship or influence between two or more variables. The quantitative approach was selected as it provides statistically measurable results and allows for objective hypothesis testing. The research was conducted through a survey distributed directly to motor vehicle taxpayers at SAMSAT Serpong, using a questionnaire as the main instrument for data collection. This quantitative survey enabled the researcher to examine the influence of modern administrative systems and tax sanctions on motor vehicle taxpayer compliance, both partially and simultaneously.

The population in this study includes all registered motor vehicle taxpayers at UPTD PPD SAMSAT Serpong throughout the year 2023. Due to the large and indeterminable size of the population, the Slovin formula was used to determine a representative sample size. This formula helps prevent the selection of a sample that is either too large or too small and ensures that the collected data adequately represents the population. Based on Slovin's formula with a margin of error (e) of 10%, the final sample size amounted to 103 respondents. The sampling technique applied was purposive sampling, which involves selecting respondents based on specific criteria in this case, individuals who paid their vehicle tax in 2023 at SAMSAT Serpong and were willing to complete the questionnaire directly.

Data collection was conducted through the distribution of digital and barcode-based questionnaires handed out directly at the research location. The questionnaire contained several statements based on the indicators of each research variable, measured using a five-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree." The Likert scale made it easier for respondents to express their opinions and enabled researchers to quantitatively analyze the results. Additionally, the distribution was carried out within a set timeframe to ensure that respondents had adequate time to understand and answer each question honestly and carefully.

The data collection instrument was constructed with reference to relevant indicators for each

variable. The modern administrative system variable (X1) was measured through four indicators: organizational restructuring, business process improvement, human resource management enhancement, and the implementation of good governance (Siti Kurnia Rahayu, 2010:110). The tax sanction variable (X2) was measured using indicators of administrative sanctions including fines, interest, and surcharges and criminal sanctions such as criminal fines and imprisonment (Mardiasmo, 2019). Meanwhile, the motor vehicle taxpayer compliance variable (Y) was measured using indicators of formal and material compliance, as outlined in Minister of Finance Decree No. 554/KMK.04/2000 (S. Pajak et al., 2022). All instruments underwent validation and reliability testing prior to field use to ensure each question accurately and consistently measured the intended variables. The data analysis method began with data quality testing, which included validity and reliability tests. The validity test assessed how well each questionnaire item measured the intended concept, while the reliability test evaluated the consistency of respondents' answers over time. This was followed by classical assumption testing, which included normality, multicollinearity, and heteroscedasticity tests to ensure the data met the prerequisites for multiple linear regression analysis.

The multiple linear regression analysis was used to determine the extent to which the modern administrative system and tax sanctions influenced taxpayer compliance—both individually (partial analysis) and jointly (simultaneous analysis). Hypothesis testing was performed using the t-test (to assess the individual impact of each independent variable) and the F-test (to assess their collective impact on the dependent variable). Additionally, the coefficient of determination ( $R^2$ ) was employed to evaluate how much of the variation in the dependent variable could be explained by the two independent variables. All data processing was conducted using the latest version of SPSS software, which facilitated accurate and efficient analysis. Through this systematic research method, the results are expected to provide empirical insights into how modern administrative systems and tax sanctions affect motor vehicle taxpayer compliance at SAMSAT Serpong. Furthermore, the findings aim to offer practical recommendations for relevant institutions to improve public services and enhance the efficiency of local tax collection.

## Result

### Respondent Characteristics

This study involved 103 motor vehicle taxpayers who completed the questionnaire in full and met the established criteria. The respondents' characteristics are categorized by gender, age, occupation, and monthly income.

**Table 1.** Respondents by Gender

Gender	Frequency	Percentage
Male	56	54.4%
Female	47	45.6%
Total	103	100%

The majority of respondents were male (54.4%), indicating that men are more likely to handle vehicle tax obligations at SAMSAT Serpong.

**Table 2.** Respondents by Age

Age Group	Frequency	Percentage
< 20 years	4	3.9%
21–25 years	30	29.1%
26–30 years	38	36.9%
31–35 years	17	16.5%

Age Group	Frequency	Percentage
> 35 years	14	13.6%
Total	103	100%

The largest age group was 26–30 years (36.9%), suggesting that individuals in the productive age range have a higher awareness of their tax obligations.

**Table 3. Respondents by Occupation**

Occupation	Frequency	Percentage
Student	23	22.3%
Private Employee	39	37.9%
Civil Servant	11	10.7%
Entrepreneur	17	16.5%
Others	13	12.6%
Total	103	100%

Most respondents were private-sector employees (37.9%), reflecting the predominance of working individuals who actively use motor vehicles in their daily activities.

**Table 4. Respondents by Monthly Income**

Monthly Income	Frequency	Percentage
< Rp1,000,000	11	10.7%
Rp1,000,001–2,000,000	20	19.4%
Rp2,000,001–3,000,000	35	34.0%
Rp3,000,001–4,000,000	22	21.4%
> Rp4,000,000	15	14.5%
Total	103	100%

The majority of respondents had a monthly income between Rp2,000,001–3,000,000 (34%), indicating that the middle-income group is significantly involved in fulfilling motor vehicle tax obligations.

### Research Instrument Testing

Before conducting further analysis, validity and reliability tests were performed on the questionnaire. Each item under the variables of Modern Administrative System ( $X_1$ ), Tax Sanctions ( $X_2$ ), and Taxpayer Compliance ( $Y$ ) was tested for validity using the Pearson Product Moment correlation. All calculated  $r$ -values exceeded the critical  $r$ -table value (0.195), with significance levels below 0.05, indicating that all questionnaire items are valid.

**Table 5. Reliability Test Results**

Variable	Cronbach's Alpha	Description
Modern Administrative System	0.887	Reliable
Tax Sanctions	0.783	Reliable
Taxpayer Compliance	0.818	Reliable

Since the Cronbach's Alpha values for all three variables are above 0.6, the instruments are considered reliable.

#### 1. Classical Assumption Testing

To ensure the data met the prerequisites for regression analysis, the classical assumption

tests were conducted:

2. Normality Test

Using the Kolmogorov-Smirnov test, the Asymp. Sig value was 0.092, which is greater than 0.05, indicating that the data is normally distributed.

3. Multicollinearity Test

All independent variables showed Tolerance values  $> 0.10$  and VIF  $< 10$ , suggesting there is no multicollinearity.

4. Heteroscedasticity Test

The Glejser test produced significance values above 0.05 for all variables, meaning no heteroscedasticity was detected.

## Multiple Linear Regression Analysis

**Table 6.** Multiple Linear Regression Output

Model	B	t	Sig.
Constant	12.674		
Modern Administrative System	0.420	4.741	0.000
Tax Sanctions	0.208	2.204	0.030

The resulting regression equation is:  $Y = 12.674 + 0.420X_1 + 0.208X_2$

The positive regression coefficients indicate that both the modern administrative system and tax sanctions have a positive influence on motor vehicle taxpayer compliance.

## Hypothesis Testing

**Table 7.** t-Test (Partial Test)

Variable	t-value	Sig.	Conclusion
Modern Administrative System	4.741	0.000	Significant
Tax Sanctions	2.204	0.030	Significant

Both independent variables individually have a significant effect on taxpayer compliance, as their Sig. values are  $< 0.05$ .

**Table 8.** F-Test (Simultaneous Test)

F-value	Sig.
24.313	0.000

Since the significance level is less than 0.05, it can be concluded that both variables jointly have a significant effect on taxpayer compliance.

## Coefficient of Determination

**Table 9.** R-Square Value

R Square
0.331

This indicates that 33.1% of the variation in taxpayer compliance is explained by the modern administrative system and tax sanctions. The remaining 66.9% is influenced by other factors not examined in this study.

## Discussion

The findings of this study reveal that both the modern administrative system and tax sanctions have a positive and significant influence on motor vehicle taxpayer compliance at UPTD PPD SAMSAT Serpong. These results emphasize that efforts to enhance public service quality particularly in motor vehicle taxation do not merely improve institutional efficiency but also foster greater awareness and compliance among taxpayers. Based on the results of the multiple linear regression analysis, the modern administrative system variable exhibited a higher regression coefficient (0.420) compared to tax sanctions (0.208), with both having significance values below 0.05. This indicates that the modern administrative system plays a more dominant role in influencing taxpayer compliance. These findings align with the research of Pratiwi and Irawan (2019), which found that technology-based tax administration systems offer greater ease and speed of service, thus encouraging higher tax compliance. Innovations such as e-SAMSAT, drive-thru services, and online payment options have improved accessibility by eliminating administrative barriers that taxpayers previously found burdensome. Additionally, a modern administrative system enhances transparency in the tax payment process, which positively impacts public trust in tax authorities.

The influence of tax sanctions should not be overlooked. While their contribution is less than that of the administrative system, the partial test results indicate that tax sanctions still have a significant effect on compliance. This finding is consistent with deterrence theory in taxation, which suggests that the presence of penalties can deter violations and noncompliance. Strict, consistent, and non-discriminatory sanctions act as effective social control mechanisms to regulate taxpayer behavior. This supports the findings of Susanti (2018), which demonstrated that taxpayers are more likely to comply when faced with real and substantial sanction risks. Therefore, the government must not only focus on delivering accessible and user-friendly services but also ensure that regulations and penalties are enforced optimally to maintain effective fiscal discipline.

Despite the positive influence of both variables, the coefficient of determination ( $R^2$ ) was only 33.1%, indicating that 66.9% of the variation in taxpayer compliance is influenced by factors outside the scope of this study. These may include personal awareness, economic conditions, educational level, tax knowledge, past experiences, or social influences. This highlights the importance of future research to explore additional variables not included in the current model. It also suggests that while service quality and legal enforcement are important, a more comprehensive and integrative approach is needed when designing strategies to enhance tax compliance. Moreover, these findings underscore the need for a balanced combination of human-centered public service and firm legal enforcement. The modern administrative system represents an effort to deliver efficient, transparent, and technology-driven public services, while tax sanctions serve as a legal pressure mechanism to ensure order and compliance. Thus, taxpayer compliance is most effectively achieved when both approaches are applied in tandem. Over-reliance on either one can lead to suboptimal outcomes. For example, offering excellent services without firm enforcement may reduce deterrent effects, while strict sanctions without adequate services may provoke resistance and distrust from the public.

In addition, the importance of education and public outreach must not be overlooked. Both modern service systems and tax sanctions will be more effective if citizens understand the value of taxation as a contribution to national and regional development. Tax literacy serves as a foundational element for cultivating a culture of compliance that is grounded not only in legality but also in ethical and civic responsibility. Therefore, local tax authorities should develop targeted education programs that reach various community groups, including youth and small business owners. Through such educational efforts, compliance can be motivated not only by the fear of penalties but also by a sense of social responsibility and personal accountability. In summary, this study reinforces the importance of combining public service innovation and law enforcement to improve fiscal compliance. In the context of local policy, these findings suggest that enhancing digital tax services should be a top priority, supported by clear and fair regulation. As such, it is recommended that relevant agencies such as the

Regional Revenue Agency and the Police Department continue to collaborate in improving service quality and monitoring taxpayer compliance. This synergy is crucial to achieving regional revenue targets effectively and sustainably.

## Conclusion

Based on the results of the study conducted on 103 motor vehicle taxpayers at UPTD PPD SAMSAT Serpong, it can be concluded that both the modern administrative system and tax sanctions significantly influence taxpayer compliance, both partially and simultaneously. Among the two, the modern administrative system exerts a greater impact, indicating that ease of access, service efficiency, and the use of technology such as e-SAMSAT, online applications, and fast-service options like drive-thru play a critical role in enhancing taxpayer compliance in motor vehicle tax payments. Meanwhile, tax sanctions continue to serve an essential role as a regulatory mechanism that creates a deterrent effect, although their influence is relatively less than that of constructive and user-friendly services. Thus, an integrated approach, combining modern public service delivery with the reinforcement of regulatory measures through consistent sanctions, can help establish a more effective and sustainable local tax system. In light of these findings, it is recommended that relevant institutions continue to develop and promote innovations in digital tax service systems, enhance training and human resource capacity, and enforce tax penalties fairly and consistently. Furthermore, ongoing public education efforts are necessary to increase awareness about the importance of taxes in regional development. This will help ensure that tax compliance is not solely driven by fear of penalties, but also arises from a genuine sense of civic responsibility and awareness as part of being a responsible citizen.

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