

The Influence of Taxpayer Understanding, Perception of Fairness, Ease of Tax Payment, and Taxpayer Compliance on The Optimization of Regional Revenue from The Opsen Scheme of Motor Vehicle Tax and Vehicle Ownership Transfer Fee

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Abstract

The implementation of Law Number 1 of 2022 concerning Financial Relations between the Central Government and Regional Governments (UU HKPD) introduces a surtax mechanism for Motor Vehicle Tax (PKB) and Vehicle Ownership Transfer Fee (BBNKB) as an effort to strengthen regional fiscal capacity. This issue is important to research because the success of the surtax is one indicator of regional fiscal independence. Previous research has heavily emphasized taxpayer compliance as the main determinant of revenue optimization but has not comprehensively explored the role of administrative ease and perception of fairness. The research problem of this study is how taxpayer understanding, perception of fairness, and ease of tax payment influence taxpayer compliance and the optimization of regional revenue through the PKB-BBNKB surtax scheme. This study uses a quantitative approach with a five-point Likert scale questionnaire distributed to taxpayers in DKI Jakarta Province who have paid PKB or BBNKB in the last two years (purposive sampling). Data were analyzed using SmartPLS 4 through validity, reliability, and structural model testing. The results show that taxpayer compliance does not have a significant effect on revenue optimization and does not act as a mediator. The novelty of this study lies in the identification of administrative ease and perception of fairness as direct determinants of revenue optimization. The research recommendations are to improve fiscal transparency, develop digital services, and enhance public communication strategies. Future research is recommended to expand the research focus to other provinces and use a longitudinal method to observe long-term dynamics.

Keywords: Taxpayer Understanding, Perception of Fairness, Ease of Tax Payment, Taxpayer Compliance, Optimization of Regional Revenue

1. Introduction

In the state financial system, the State Revenue and Expenditure Budget (APBN) plays a important role as a fiscal instrument to achieve national development goals. One of the main components of the APBN is the transfer of funds to regions through the schemes of the General Allocation Fund (DAU), Special Allocation Fund (DAK), and Revenue Sharing Fund (DBH) (Aldo Yanuarto et al., 2024). However, the limitation of fund transfers from the central government requires regional governments to be more independent by optimizing Regional Original Revenue (PAD) (Qibthiyyah, 2023). PAD has a strategic role in supporting regional fiscal independence. PAD optimization is generally carried out through regional taxes and levies (Rhena Maharani et al., 2023). Unfortunately, the realization of taxes and levies is often not optimal due to low public understanding, lack of trust in the use of taxes, and administrative constraints. Therefore, the tax management approach needs to consider aspects of taxpayer behavior, such as perceptions of fairness, ease of payment, and voluntary compliance (Irmawati et al., 2024).

An important reform came through Law Number 1 of 2022 concerning Financial Relations between the Central Government and Regional Governments (UU HKPD), which introduced the surtax scheme. This scheme regulates the revenue sharing of Motor Vehicle Tax (PKB) and Vehicle Ownership Transfer Fee (BBNKB) between provinces and districts/cities (Tumanggor et al., 2023).

PKB and BBNKB contribute significantly to PAD, especially in DKI Jakarta, which has the highest mobility and vehicle ownership rates in Indonesia (Fauziah & Ginting, 2022). The surtax policy is expected to improve efficiency, fiscal fairness, and taxpayer participation (Syifa et al., 2024). However, the implementation of the surtax also presents challenges, such as institutional readiness, integration of administrative systems, and potential public resistance due to the perception of a new tax burden (Ditjen Keuangan Daerah, n.d.). Based on data from the Ministry of Home Affairs, the national revenue realization from PKB and BBNKB reached Rp77.91 trillion in 2021 (47.39% of national PAD), increasing to Rp88.78 trillion in 2022 or 46.53% of national PAD (Susanto & Fiorita, 2023). This indicates the vital role of the motor vehicle sector in regional revenue.

In the context of DKI Jakarta, revenue optimization through the surtax depends not only on regulations but also on public understanding, perception of fairness, and tax compliance (Musgrave, 1959). The lack of socialization of the UU HKPD and perceptions of injustice have the potential to reduce taxpayer compliance. Therefore, it is important to conduct empirical research on the influence of understanding, perception of fairness, and ease of tax payment on taxpayer compliance and the optimization of regional revenue through the PKB and BBNKB surtax. The results of this study are expected to contribute to the development of taxation science and provide practical input for the government in designing more effective and equitable fiscal policies for PAD optimization through the PKB and BBNKB surtax scheme (Putra Wicaksono, 2024).

2. Literature Review

Tax compliance can be understood through the framework of the Theory of Fiscal Exchange (TFE), which emphasizes a reciprocal relationship between the state and its citizens. In this framework, paying taxes is not only seen as a coercive legal obligation but also as a form of exchange where citizens have the right to demand public benefits from the state. This means that compliance arises not only from repressive legal sanctions but is largely determined by the perception of benefits received by the community after paying taxes (Frey & Feld, 2007); (Levi & Sacks, 2009). This concept is consistent with the benefit principle, which states that every rupiah of tax should be returned in the form of fair and tangible public services. Furthermore, TFE is reinforced by the idea of a psychological tax contract, which outlines how trust, procedural justice, and government transparency are key to promoting voluntary compliance (Samrin et al., 2023). Field survey evidence shows that the level of public fiscal knowledge, trust in government, and perception of public benefits are closely related to fiscal legitimacy. Research by (Vambia et al., 2025) confirms that the higher the trust in the government. Therefore, in the context of regional policy, TFE provides a relevant framework for governments in designing clear fiscal communication strategies and providing public services that can be directly felt by the community to strengthen long-term legitimacy and compliance.

The application of the surtax policy on Motor Vehicle Tax (PKB) and Vehicle Ownership Transfer Fee (BBNKB) is a real example of implementing the TFE principle in regional taxation. Tax is essentially a mandatory contribution from the people regulated by law, is coercive, and is intended for the greatest prosperity of the people (Hilmiyah et al., 2023). In line with this, Law No. 1 of 2022 concerning Financial Relations between the Central Government and Regional Governments (UU HKPD) introduced the surtax scheme on PKB and BBNKB as a fiscal innovation. This surtax differs from the revenue-sharing scheme because the collected revenue is recorded directly as Regional Original Revenue (PAD) without going through a distribution mechanism from the central government. Consequently, regional revenue becomes more certain, faster, and more measurable (Subki & Martiningsih, 2024); (Wiranata, 2024). In particular, the PKB and BBNKB surtax is seen as capable of increasing the regional revenue of DKI Jakarta because all surtax revenue goes directly into the regional government's treasury. This also strengthens regional fiscal governance by providing greater flexibility

in allocating budgets for priority development. Thus, the surtax can be seen as an effective instrument in strengthening local taxing power and expanding the fiscal space of regional governments in order to optimize PAD (Subki & Martiningsih, 2024); (Wiranata, 2024) (Pritasari, 2018).

The successful implementation of the surtax scheme heavily depends on taxpayer factors, especially their understanding and perception of the policy. Good tax literacy enables taxpayers to understand their obligations, payment procedures, and the benefits of their tax contributions, thereby increasing compliance (Pritasari, 2018); (Bhegawati et al., 2023). This understanding is crucial because the surtax brings significant changes in revenue allocation. When the public knows that motor vehicle tax payments have a direct impact on regional development, their willingness to comply tends to increase (Tumanggor et al., 2023). Conversely, a lack of understanding can lead to administrative errors and non-compliance, requiring continuous counseling and socialization. In addition to knowledge, the perception of fairness also plays an important role. A tax system that is perceived as fair both in the context of horizontal and vertical justice will increase trust and encourage voluntary compliance (Herman et al., 2019). Under the surtax scheme, the additional levy will only be accepted by the public if it is perceived as proportional to the public benefits received, such as infrastructure development and service improvements. Injustice in the distribution of benefits can potentially weaken compliance, while tangible evidence of benefits strengthens fiscal legitimacy (Herman et al., 2019).

Furthermore, the ease of paying taxes, including the digitalization of services through the SIGNAL application, has also been proven to reduce administrative and technical barriers. This factor ultimately strengthens compliance and contributes to an increase in regional revenue (Alfian, 2023); (Manullang & Khairudin, 2024). Thus, taxpayer compliance becomes an essential mediating variable between the factors of understanding, perception of fairness, and ease of payment with Revenue regional optimization. Without compliance, the existing tax potential cannot be fully realized (Karsam et al., 2022). Therefore, the theoretical understanding and empirical evidence described form the basis for formulating the research hypotheses regarding the influence of these factors on the optimization of regional revenue through the PKB and BBNKB surtax scheme.

A. Hypotheses Development

Tax knowledge is a fundamental element that every taxpayer must possess. Without sufficient understanding of tax regulations, it is difficult for taxpayers to perform their fiscal responsibilities properly (Bhegawati et al., 2023). According to (Wahyuni, 2018), understanding tax rules enhances taxpayer compliance, which includes correctly completing tax forms, calculating payable tax amounts, and paying and reporting taxes on time. Tax literacy enables taxpayers to understand their rights and obligations, as well as the procedures and objectives of taxation. In the context of the Opsen scheme for PKB and BBNKB, taxpayers who understand how their contributions are directly allocated to local development are more likely to support fiscal performance. Hence, a higher level of understanding is expected to improve compliance and consequently optimize regional revenue (Nurhayati et al., 2025).

H1: Public understanding has a positive effect on the optimization of regional revenue

According to (Wulandari & Budiaji, 2018), fairness includes both fairness in legislation (tax rates aligned with taxpayers' capacity) and fairness in enforcement (equal treatment of taxpayers' rights and obligations). When taxpayers perceive fairness in taxation, they tend to be more compliant and cooperative. Fairness encompasses the belief that the tax burden is proportional to public benefits such as better infrastructure and transparent public spending (Herman et al., 2019). Therefore, perceived fairness strengthens public trust in tax authorities and enhances voluntary compliance, which in turn increases local fiscal performance and revenue optimization.

H2: Public perception of fairness has a positive effect on the optimization of regional revenue

Ease of tax payment refers to accessibility, efficiency, and convenience in administrative and technical processes. In the digital era, innovations such as the Samsat Digital Nasional (SIGNAL) application simplify vehicle tax payments and enhance transparency. Research by (Alfian, 2023) at Universitas Negeri Jakarta found that digital payment convenience through SIGNAL has a significant positive impact on regional tax revenue, as it encourages taxpayers to make timely payments. Therefore, the higher the perceived convenience of paying taxes, the greater the potential for optimizing regional tax revenue, especially within the Opsen PKB–BBNKB digital scheme in DKI Jakarta (Khasanah & Evina Hutabarat, 2025).

H3: Ease of tax payment has a positive effect on the optimization of regional revenue

Tax understanding reflects how well taxpayers comprehend substantive and procedural regulations, including rights, obligations, sanctions, and objectives of taxation (Pritasari, 2018). Clear understanding fosters positive attitudes toward taxes and moral awareness to comply. In the case of the PKB–BBNKB Opsen mechanism, understanding becomes even more critical because taxpayers who recognize the direct benefit of their taxes to regional development are more likely to comply voluntarily. Conversely, lack of understanding may lead to administrative errors or noncompliance.

H4: Taxpayer understanding has a positive effect on taxpayer compliance

Perceived fairness refers to taxpayers' sense that the tax system is equitable both horizontally (equal treatment for similar taxpayers) and vertically (different burdens according to ability to pay). When taxpayers perceive fairness, they feel morally obligated to comply as a form of social contribution. Prior research indicates that perceived fairness positively affects tax compliance (Tyler, 1990). Therefore, fairness perception enhances taxpayers' moral commitment and willingness to fulfill their fiscal obligations.

H5: Perception of fairness has a positive effect on taxpayer compliance

Ease of tax payment includes access to information, simple procedures, and various payment options such as online platforms and fast service counters. In the digitalization era, systems like SIGNAL allow taxpayers to pay taxes anytime and anywhere, reducing administrative barriers. According to the Theory of Planned Behavior (TPB) (Manullang & Khairudin, 2024), perceived ease influences an individual's intention and behavior. When the tax payment process is simple, taxpayers are more motivated to comply voluntarily.

H6: Ease of tax payment has a positive effect on taxpayer compliance

Taxpayer compliance can be observed from their understanding of tax rules, accuracy in calculating tax dues, and punctuality in payment and reporting (Wahyuni, 2018). High compliance levels ensure that potential tax revenues are effectively collected, while low compliance causes unrealized revenue potential. Therefore, taxpayer compliance plays a crucial role in supporting the optimization of local revenue under the PKB–BBNKB Opsen mechanism.

H7: Public compliance has a positive effect on the optimization of regional revenue

Taxpayer awareness increases when individuals have a positive attitude toward taxation. Well informed taxpayers are more likely to fulfill their tax obligations correctly, which leads to greater compliance and higher regional revenue (Febrian & Ristiliana, 2019). Continuous education and socialization programs also strengthen public understanding of taxes as collective participation in financing government functions. Consequently, taxpayer compliance is expected to mediate the effect of understanding on revenue optimization.

H8: Taxpayer understanding has a positive effect on taxpayer compliance and the optimization of regional revenue

The principle of fairness in taxation states that taxes should be imposed according to each individual's economic capacity. When taxpayers feel the system is fair, they are more willing to comply voluntarily (Herman et al., 2019). Perceived fairness therefore not only influences compliance but also contributes to broader fiscal legitimacy and revenue growth. Hence, taxpayer compliance mediates the relationship between perceived fairness and regional revenue optimization.

H9: Perception of fairness has a positive effect on taxpayer compliance and the optimization of regional revenue

Ease of payment reflects the government's efforts to simplify administrative processes through accessible and efficient systems. A convenient tax system reduces technical barriers and increases trust in fiscal institutions (Karsam et al., 2022). As a result, compliance rises and revenue collection becomes more effective. Therefore, taxpayer compliance is expected to mediate the relationship between ease of payment and regional revenue optimization.

H10: Ease of tax payment has a positive effect on taxpayer compliance and the optimization of regional revenue

3. Method

This research was conducted on Motor Vehicle Tax (PKB) and Vehicle Ownership Transfer Fee (BBNKB) taxpayers in DKI Jakarta Province, focusing on the variables of understanding, perception of fairness, ease of payment, and compliance, which are expected to influence the optimization of Regional Original Revenue (PAD) through the surtax scheme. The research method used a descriptive and explanatory quantitative approach (Sugiyono, 2019a), with primary data collected via an online five-point Likert-scale questionnaire and secondary data from the literature on the tax surtax. The sample size was determined using the Slovin formula, while the sampling technique used purposive sampling with the criteria that the taxpayers are motor vehicle owners in DKI Jakarta who have made Motor Vehicle Tax or Vehicle Ownership Transfer Fee payments within the last two years. The data were analyzed using SmartPLS 4 through stages of descriptive statistics, outer model evaluation (validity and reliability), inner model evaluation (R^2 , path coefficient, predictive relevance), and hypothesis testing with a bootstrapping technique. A hypothesis is considered significant if the T-statistic value is $\geq 1,96$ or p-value $< 0,05$ (Memon & Rahman, 2014). The research measurement instrument was adopted from instruments developed by previous research, as shown in Table 1.

This study uses a measurement scale, namely a Likert scale with a score range from 1 to 5. This scale is used to measure respondents' perceptions of the statements presented in the questionnaire. Respondents were asked to choose a level of agreement ranging from Strongly Disagree (score 1) to Strongly Agree (score 5). The higher the score given, the greater the respondent's level of agreement with the statement reflecting the research variables, such as understanding, perception of fairness, ease of tax payment, taxpayer compliance, and optimization of regional revenue. The use of the Likert scale is considered appropriate because it can capture respondents' attitudes and perceptions in a more measurable way, and it has been widely used in previous studies to analyze taxpayer compliance behavior (Karsam et al., 2022); (Sumarta & Meliawati, 2021).

4. Result and Discussion

This research aims to analyze the influence of understanding, perception of fairness, ease of payment, and taxpayer compliance on the optimization of regional revenue through the surtax scheme

for Motor Vehicle Tax (PKB) and Vehicle Ownership Transfer Fee (BBNKB) in DKI Jakarta Province. Primary data were collected from respondents via an online five-point Likert-scale questionnaire, which they completed independently based on their experiences and knowledge. The sampling technique used was non-probability purposive sampling with the following respondent criteria: domiciled in DKI Jakarta, having made Motor Vehicle Tax (PKB) or Vehicle Ownership Transfer Fee (BBNKB) payments within the last two years, and possessing basic knowledge of the motor vehicle tax payment process (Wulandari & Budiaji, 2018).

Table 1. Variable Measurement

Variable	Indicators	Reference
Influence of Understanding	1. Understanding of tax obligations	(Bhegawati et al., 2023)
	2. Awareness of the opsen scheme	
	3. Knowledge of tax calculation rules	
	4. Accessibility of tax information	
	5. Effect of understanding on payment timeliness	
Perception of Fairness	1. Fairness of tax rate relative to vehicle value	(Wilestari & Ramadhani, 2020)
	2. Equal application of the opsen system	
	3. Fair allocation of tax revenues	
	4. Equality across vehicle types and regions	
Ease of Tax Payment	1. Simplicity of payment procedure	(Karsam et al., 2022)
	2. Availability of digital channels	
	3. Clarity and timeliness of payment information	
Taxpayer Compliance	1. Administrative compliance	(Sumarta & Meliawati, 2021)
	2. Voluntary compliance	
	3. Moral and legal responsibility	
	4. Effect of understanding, fairness, and convenience on compliance	
Optimization of Regional Revenue	1. The effect of taxpayer compliance on regional revenue growth	(Sumarta & Meliawati, 2021)
	2. The contribution of vehicle tax to regional development	
	3. The impact of vehicle tax realization on public facilities	
	4. Efficiency of revenue collection through collective compliance	

Table 2. Respondent Demographics

Respondent Demographics	Characteristic	Proportion	Percentage
Gender	Male		51.4%
	Female		48.6%
Domicile	Central Jakarta		14.9%
	Souht Jakarta		29.1%
	West Jakarta		12.2%
	East Jakarta		24.3%
	North Jakarta		19.6%
Age	17 – 25 Years		37.8%
	26 – 35 Years		35.1%
	36 – 45 Years		16.2%
	45 – 55 Years		6.1%
	>56 Years		4.8%

Table 3. CA (Cronbach's Alpha), CR (Composite Reliability), AVE (Average Variance Extracted)

Variable	Cronbach's Alpha (CA)	Composite Reliability (CR)	Average Variance Extracted (AVE)
Ease of Tax Payment	0.567	0.776	0.536
Taxpayer Compliance	0.733	0.833	0.556
Optimization of Regional Revenue	0.757	0.847	0.586
Influence of Understanding	0.796	0.860	0.551
Perception of Fairness	0.881	0.918	0.736

Table 2 shows that the respondents in this study comprised 51.4% males and 48.6% females, indicating a relatively balanced gender distribution. By domicile, respondents were distributed across all administrative areas of DKI Jakarta, with the most significant proportion from South Jakarta (29.1%), followed by East Jakarta (24.3%), North Jakarta (19.6%), Central Jakarta (14.9%), and West Jakarta (12.2%). The majority of respondents were in the productive age range of 17–35 years (72.9%), reflecting a group with high economic activity and responsiveness to digital tax service innovations. The even distribution of respondents in each area provides a comprehensive representation of taxpayer behavior in DKI Jakarta, so the research results can be used as a basis for formulating policies to increase compliance and optimize regional revenue through the PKB and BBNKB surtax scheme (Sugiyono, 2019b).

Furthermore, validity and reliability analyses were performed to ensure that the research instrument accurately measures the variables and that the measurement results are consistent. Validity was assessed using the factor loading criterion of ≥ 0.70 , indicating that the statement items effectively represent the construct. Reliability is considered acceptable if Cronbach's Alpha (CA) and Composite Reliability (CR) are ≥ 0.70 , and the Average Variance Extracted (AVE) is ≥ 0.50 (J. Hair & Alamer, 2022). According to Table 3, most research variables meet these criteria. The reliability test results show that the variables Taxpayer Compliance, Optimization of Regional Revenue, Understanding, and Perception of Fairness have CA, CR, and AVE values above the minimum thresholds, making them both consistent and valid.

Table 3 demonstrates that the construct reliability test results indicate nearly all variables in this study have Cronbach's Alpha (CA), Composite Reliability (CR), and Average Variance Extracted (AVE) values exceeding the recommended thresholds- CA ≥ 0.70 , CR ≥ 0.70 , and AVE ≥ 0.50 (J. Hair & Alamer, 2022). This suggests that the indicators used are consistent in measuring the latent constructs and possess adequate convergent validity. Notably, the Ease of Tax Payment variable has a CA value of 0.567, which falls below the 0.70 threshold. However, its CR (0.776) and AVE (0.536) meet the recommended criteria. According to J. Hair & Alamer (2022), this situation remains acceptable because CR is a more accurate measure of reliability than CA. Therefore, even though the internal reliability of the Ease of Tax Payment variable is relatively low, this construct can still be retained in the research model. Additionally, the other variables- Taxpayer Compliance, Optimization of Regional Revenue, Understanding, and Perception of Fairness- satisfy all reliability and convergent validity criteria. Notably, the Perception of Fairness variable shows the highest results, with CA (0.881), CR (0.918), and AVE (0.736), indicating that it is highly reliable and valid.

To strengthen the validity and reliability results, a discriminant validity test was performed to assess the correlation between variables. The results of this test are shown in Table 4. Table 4 shows that the research model meets the discriminant validity criteria. This finding is consistent with the view of Henseler (Henseler et al., 2015), who asserts that the HTMT is a more sensitive measure than the Fornell-Larcker criterion. In addition, (J. F. Hair, 2017) states that an HTMT value of ≤ 0.90 already indicates good discriminant validity, while a value between 0.90–0.95 is still acceptable for closely related constructs. Thus, although there is one relationship with a value above the limit, the overall research model is still feasible for use in the next stage of analysis. Next, the coefficient of determination (R^2) is used to assess how well the independent variables in this study can explain the variation in the dependent variables. The coefficient of determination (R^2) is used to measure how much of the variation in the dependent variable can be explained by the independent variables in the model. The R^2 value ranges from 0 to 1, with general interpretations: 0.75 = strong, 0.50 = moderate, 0.25 = weak.

Table 4. Discriminant Validity Testing

	Ease of Tax Payment	Taxpayer Compliance	Optimization of Regional Revenue	Influence of Understanding	Perception of Fairness
Ease of Tax Payment	-	1.087	0.961	0.824	0.801
Taxpayer Compliance	-	-	0.574	0.681	0.504
Optimization of Regional Revenue	-	-	-	0.692	0.812
Influence of Understanding	-	-	-	-	0.782
Perception of Fairness	-	-	-	-	-

Table 5. R Square Test Results

Endogenous Variable	R²
Taxpayer Compliance	0.532
Optimization of Regional Revenue	0.562

Based on Table 5, it is known that the independent variables can explain 53.2% of the variation in Taxpayer Compliance and 56.2% of the variation in Optimization of Regional Revenue. This result indicates that more than half of the variation in both compliance behavior and regional revenue optimization is influenced by the factors studied in this model, namely understanding, perception of fairness, and ease of tax payment. Meanwhile, the remaining 46.8% and 43.8%, respectively, are explained by other variables outside the model, such as socio-demographic factors, the effectiveness of fiscal supervision, or the quality of public services. The adjusted R² values, which are the same as the R² values (0.532 and 0.562), indicate that the research model is stable and not biased by the number of predictors. This consistency strengthens the belief that the chosen constructs have a real contribution to the dependent variables. Referring to Hair's criteria (J. F. Hair, 2017), R² values above 0.50 are considered moderate, so the model's explanation is sufficiently strong for social and public policy research. This means the model can provide a representative empirical picture of the relationships between the variables. Furthermore, this result supports the relevance of the Theory of Fiscal Exchange, which emphasizes the importance of public benefit exchange in increasing compliance. Thus, this research model is not only feasible for further analysis but also has the potential to provide an empirical basis for fiscal policy recommendations in DKI Jakarta.

The final stage of the analysis is hypothesis testing, which aims to determine whether the previously formulated research hypotheses can be accepted or rejected. The testing was conducted by considering the results of validity, reliability, coefficient of determination (R²), path coefficient, mediation analysis, and predictive relevance (Q²predict) within the SEM-PLS framework. A summary of the hypothesis test results is presented in Tables 6 and 7, which systematically describes the relationships between the variables in this study. These findings provide an empirical picture of how factors such as understanding, perception of fairness, and ease of tax payment affect taxpayer compliance, and how compliance, in turn, plays a role in optimizing regional revenue. With these results, the research can draw more comprehensive conclusions about the validity of the model used and confirm the extent to which the theoretical factors formulated within the Theory of Fiscal Exchange framework are empirically tested in the context of the PKB and BBNKB surtax implementation in DKI Jakarta.

Based on the hypothesis testing results shown in Figure 1, it can be concluded that Ease of Tax Payment has a significant effect on Taxpayer Compliance (p-value = 0.000 ≤ 0.05) and on the Optimization of Regional Revenue (p-value = 0.000 ≤ 0.05). Taxpayer Understanding has a significant effect on Taxpayer Compliance (p-value = 0.013 ≤ 0.05), but does not affect Optimization of Regional

Revenue (p-value = 0.455 \geq 0.05). Perception of Fairness has a significant effect on Optimization of Regional Revenue (p-value = 0.000 \leq 0.05) but does not affect Taxpayer Compliance (p-value = 0.306 \geq 0.05). Meanwhile, Taxpayer Compliance does not have a significant effect on Optimization of Regional Revenue (p-value = 0.488 \geq 0.05).

Table 6. Direct Variable Hypothesis Test

Direct Variable	STDEV	T-Statistic	P-Value	Result
East of Tax Payment → Taxpayer Compliance	0.633	9.086	0.000	Significant
East of Tax Payment → Optimization of Regional Revenue	0.418	3.711	0.000	Significant
Taxpayer Compliance → Optimization of Regional Revenue	-0.076	0.693	0.488	Not Significant
Taxpayer Understanding → Taxpayer Compliance	0.253	2.487	0.013	Significant
Taxpayer Understanding → Optimization of Regional Revenue	0.079	0.747	0.455	Not Significant
Perception of Fairness → Taxpayer Compliance	-0.118	1.024	0.306	Not Significant
Perception of Fairness → Optimization of Regional Revenue	0.419	4.651	0.000	Not Significant

Table 7. Indirect Variable Hypothesis Test

Variabel Tidak Langsung	STDEV	T-Statistic	P-Value	Result
East of Tax Payment → Taxpayer Compliance → Optimization of Regional Revenue	-0.048	0.678	0.498	Not Significant
Taxpayer Understanding → Taxpayer Compliance → Optimization of Regional Revenue	-0.019	0.619	0.536	Not Significant
Perception of Fairness → Taxpayer Compliance → Optimization of Regional Revenue	0.009	0.459	0.646	Not Significant

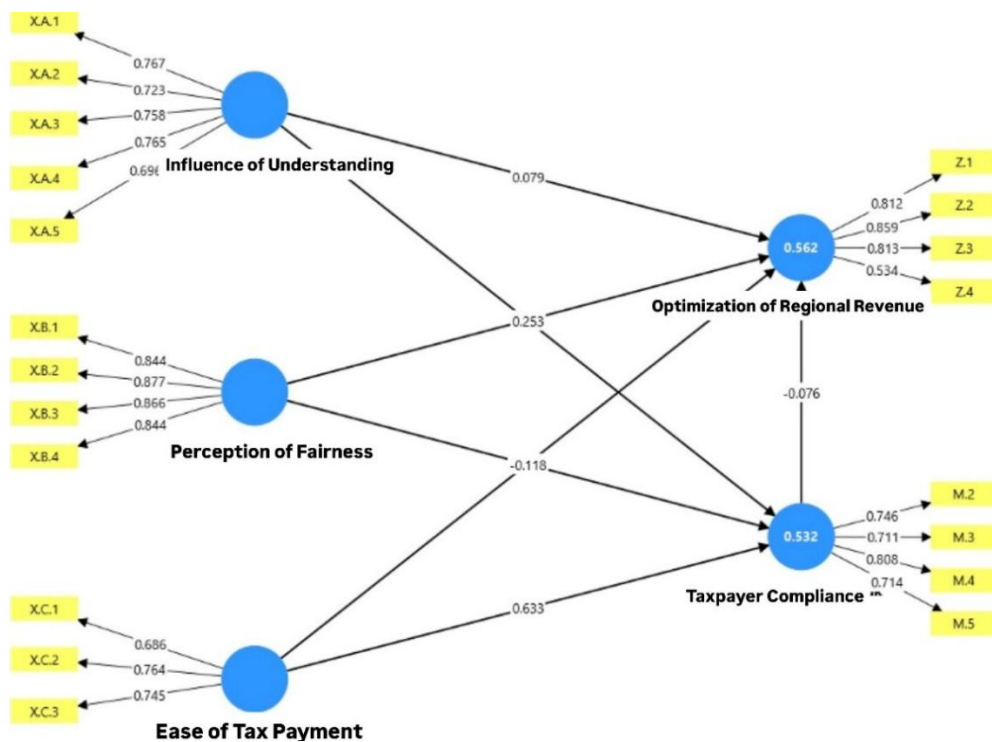


Figure 1. Hypothesis Test Results

The hypothesis test results show that Ease of Tax Payment is the most dominant factor influencing both Taxpayer Compliance and Optimization of Regional Revenue. This finding aligns with the research of Neo et al., which states that digitalizing the tax payment system can increase compliance by making procedures simpler and more convenient (Karsam et al., 2022). Furthermore, Taxpayer Understanding significantly affects compliance but does not directly influence revenue optimization. This suggests that although tax knowledge can encourage individual compliance, its impact on regional revenue becomes evident only when supported by other factors such as administrative ease and fiscal transparency. This finding is consistent with Wahyuni's study, which states that understanding tax regulations plays a greater role in fostering administrative compliance (Wahyuni, 2018).

Meanwhile, Perception of Fairness was found to influence the optimization of regional revenue but not significantly compliance. This condition indicates that public perception of fairness in tax distribution has a greater impact on macro-level fiscal legitimacy than on individual compliance. This aligns with Herman et al., who emphasize the importance of the perception of fairness in establishing the legitimacy of the tax system (Herman et al., 2019). As for Taxpayer Compliance, it does not have a significant effect on the optimization of regional revenue. This finding shows that revenue increases are more influenced by structural factors like the surtax mechanism and digital payment systems than by individual compliance alone. This reinforces the idea that compliance does not always directly lead to higher revenue, as stated by Putra (Putra, 2024). Overall, the results of this study confirm that policy strategies should focus on simplifying the tax administration system and enhancing fiscal fairness, as these are the most significant factors in supporting the optimization of regional revenue through the PKB and BBNKB surtax scheme.

5. Conclusion

Based on the research findings, ease of tax payment emerges as the most dominant factor influencing both taxpayer compliance and the optimization of regional revenue. The digitalization of tax payment services increases compliance by simplifying procedures and enhancing convenience. While taxpayer understanding significantly affects compliance, it does not directly influence revenue optimization, indicating that knowledge alone yields fiscal benefits only when supported by a simple and transparent administrative system. The perception of fairness has a notable impact on regional revenue optimization, as fair tax distribution strengthens fiscal legitimacy at the macro level, although it does not significantly affect individual compliance. Meanwhile, taxpayer compliance does not significantly influence revenue optimization, suggesting that increases in revenue are more strongly driven by structural factors such as surtax mechanisms and digital payment integration. Therefore, policy strategies should focus on simplifying tax administration and improving fiscal fairness, as these two factors most effectively support the optimization of regional revenue.

In line with these findings, it is recommended that regional governments continue to develop digital tax payment systems that are accessible, transparent, and user-friendly in order to increase compliance and accelerate revenue collection. Tax education and socialization programs should be strengthened to improve taxpayer understanding, although these efforts must be supported by administrative simplification to produce a measurable impact on revenue. Furthermore, perceptions of fiscal fairness need to be enhanced through transparent and accountable tax distribution policies to reinforce the legitimacy of the tax system. Structural reforms—such as regulatory simplification, improvement of the surtax mechanism, and integration of fiscal information systems—should be prioritized, as they have been shown to be more influential in driving regional revenue optimization than relying solely on changes in individual taxpayer behavior.

References

- Aldo Yanuarto, Muhammad Syahbintang Maesa Putra, & Novita Angraeni. (2024). Optimalisasi Distribusi Dana APBN Ke Daerah Otonom. *Desentralisasi : Jurnal Hukum, Kebijakan Publik, dan Pemerintahan*, 2(1), 53–66. <https://doi.org/10.62383/desentralisasi.v2i1.387>
- Alfian, R. (2023). Pengaruh Kepatuhan Membayar Pajak dan Tingkat Kemudahan Dalam Pembayaran Pajak Terhadap Penerimaan Pajak Dengan Sistem Samsat Digital Nasional (Signal) Sebagai Variabel Moderasi.
- Bhegawati, D. A. S., Verawati, Y., & Widyantari, G. A. R. (2023). Pengaruh Tarif Pajak Progresif, Kualitas Pelayanan, Sanksi, Kesadaran, Dan Pengetahuan Pajak Terhadap Kepatuhan Wajib Pajak Kendaraan Bermotor. *Journal of Applied Accounting*, 2(1), 17–23. <https://doi.org/10.52158/jaa.v2i1.522>
- Ditjen Keuangan Daerah. (n.d.). *Optimalisasi pajak kendaraan bermotor dan bea balik nama kendaraan bermotor melalui peningkatan kepatuhan pembayaran pajak kendaraan bermotor.*
- Fauziah, Y. R., & Ginting, W. (2022). The effect of motor vehicle taxpayer knowledge, tax payment system (e-samsat) and taxpayer awareness on motor vehicle taxpayer compliance in the city of bandung. *Journal of Accounting Inaba*, 1(02), 128–134. <https://doi.org/10.56956/jai.v1i02.130>
- Febrian, W. D., & Ristiliana, R. (2019). Pengaruh Pengetahuan dan Kesadaran Wajib Pajak Terhadap Kepatuhan Wajib Pajak dalam Membayar Pajak Bumi dan Bangunan (PBB) pada Kantor Badan Pendapatan Daerah Kota Pekanbaru. *Eklektik : Jurnal Pendidikan Ekonomi dan Kewirausahaan*, 2(1), 181. <https://doi.org/10.24014/ekl.v2i1.7563>
- Frey, B. S., & Feld, L. P. (2007). *Tax evasion and the psychological tax contract.*
- Hair, J., & Alamer, A. (2022). Partial Least Squares Structural Equation Modeling (PLS-SEM) in second language and education research: Guidelines using an applied example. *Research Methods in Applied Linguistics*, 1(3), 100027. <https://doi.org/10.1016/j.rmal.2022.100027>
- Hair, J. F. (Ed.). (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (Second edition). Sage.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Herman, L. A., Dewi, A. S., & Dewi, M. K. (2019). Perilaku kepatuhan wajib pajak yang dipersepsikan melalui faktor deterrence, keadilan dan norma sosial. *Jurnal Benefita*, 1(1), 146. <https://doi.org/10.22216/jbe.v1i1.3873>
- Hilmiyah, F., Maretianiandini, S. T., & Tsabita, Z. A. (2023). Analisis Potensi Opsen Pajak Kendaraan Bermotor bagi Penerimaan Daerah: Studi Kasus Kabupaten Cirebon. 3(1).
- Irmawati, Andi Bahrnan Syam, Baharuddin, & Sudirman. (2024). Optimalisasi pendapatan asli daerah melalui pajak dan retribusi. *Jurnal Ilmiah Administrasita*, 15(1), 74–82. <https://doi.org/10.47030/administrasita.v15i1.752>
- Karsam, K., Sasmita, D., Dewi, S., Solihin, S., Tedja, B., & Ksp, A. (2022). E-filling system, sanksi pajak, pelayanan fiskus, pemahaman wajib pajak, kesadaran wajib pajak terhadap kepatuhan wajib pajak.
- Khasanah, D. anjar, & Evina Hutabarat, R. (2025). The Effect Of Local Taxes, Capital Expenditure, and GDP on Regency/City Revenue in East Java Province. *Jurnal Ilmu Ekonomi (JIE)*.
- Levi, M., & Sacks, A. (2009). Legitimizing beliefs: Sources and indicators. *Regulation & Governance*, 3(4), 311–333. <https://doi.org/10.1111/j.1748-5991.2009.01066.x>
- Manullang, M. U. & Khairudin. (2024). Analisis Tax Compliance Behavior Pendekatan Theory Of Planned Behavior. *El-Mal: Jurnal Kajian Ekonomi & Bisnis Islam*, 5(4), 1945–1952. <https://doi.org/10.47467/elmal.v5i4.815>
- Memon, A. H., & Rahman, I. A. (2014). SEM-PLS Analysis of Inhibiting Factors of Cost Performance for Large Construction Projects in Malaysia: Perspective of Clients and Consultants. *The Scientific World Journal*, 2014, 1–9. <https://doi.org/10.1155/2014/165158>
- Musgrave, R. A. (1959). *A Brief History of Fiscal Doctrine.*
- Nurhayati, Maksun, A., Siregar, N. B., & Nasution, F. N. (2025). Determinant Factor of Individual Taxpayer Compliance in Indonesia: Integrates of TPB Theory and Social Identity Theory. *Journal of Risk and Financial Management*, 18(11), 595. <https://doi.org/10.3390/jrfm18110595>
- Pritasari, D. (2018). Pengaruh Pemahaman Perpajakan Dan Kualitas Pelayanan Pajak Terhadap Kepatuhan Wajib Pajak.
- Putra, A. N. M. (2024). Pkb bnnkb dan jumlah kepatuhan objek pkb sebagai prediktor pad dki jakarta. 4.
- Putra Wicaksono, G. (2024). The Influence of Taxpayer Awareness, Turnover, and Tax Sanctions on Restaurant Taxpayer Compliance in Madiun. *International Journal of Business, Education, Humanities and Social Sciences*.

- Qibthiyah, R. M. (2023). *The Effect of Environmental Tax—Spending Mix on Province Air Quality*.
- Rhena Maharani, Adfiyani Fadjar, & Erwa Sastrawan. (2023). Analisis Pendapatan Asli Daerah (PAD) Sebagai Upaya Menuju Kemandirian Daerah Provinsi Sulawesi Tengah. *Manajemen Kreatif Jurnal*, 1(2), 186–196. <https://doi.org/10.55606/makreju.v1i2.1353>
- Samrin, L. O. M., Mus, A. R., & Lannai, D. (2023). Pengaruh Penggunaan Online Sistem, Pengetahuan Perpajakan, dan Kesadaran Pajak, terhadap kepatuhan Wajib Pajak Restoran di Kota Makassar. *Jurnal Akuntansi Dan Sistem Informasi*, 1.
- Subki, F. H., & Martiningsih, Rr. S. P. (2024). Fiscal Accounting Strategies in Optimizing Local Revenue Through Taxes on PKB and BBNKB. *Formosa Journal of Multidisciplinary Research*, 3(9), 3195–3212. <https://doi.org/10.55927/fjmr.v3i9.11125>
- Sugiyono. (2019a). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Alfabeta.
- Sugiyono. (2019b). *Metode Penelitian Pendidikan (Kuantitatif, Kualitatif, Kombinasi, R&D dan Penelitian Pendidikan*. Alfabeta.
- Sumarta, R., & Meliawati. (2021). Faktor–Faktor yang Mempengaruhi Kepatuhan Wajib Pajak Orang Pribadi di KPP Wilayah Jakarta Utara. *Universitas Muhammadiyah Jakarta*, 11.
- Susanto, Y. K., & Fiorita, I. (2023). Taxpayer compliance: Taxpayer behavior analysis and tax awareness as a mediating in indonesia. *Jurnal Bisnis Dan Akuntansi*, 25(1), 197–206. <https://doi.org/10.34208/jba.v25i1.2067>
- Syifa, Syauqiyah, & Inayati. (2024). Analysis of tax open policy in indonesia. . . *COSTING*.
- Tumanggor, P., Zulyadi, R., & Siregar, T. (2023). Penegakan Hukum dalam Pelayanan Pemungutan Pajak Kendaraan Bermotor (PKB) di Kantor Unit Pelaksana Teknis Pengelolaan Pendapatan Daerah (UPT PPD) Pandan, Provinsi Sumatera Utara. *Journal of Education, Humaniora and Social Sciences (JEHSS)*, 5(3), 2012–2028. <https://doi.org/10.34007/jehss.v5i3.1454>
- Tyler, T. R. (1990). *Why People Obey The Law*. Yale University Press.
- Vambias, A. D., Putra, M. S. W. P., & Siregar, H. O. (2025). Analisis potensi penerimaan opsen pajak kendaraan bermotor: Studi kasus di kota yogyakarta. *Monex: Journal of Accounting Research*, 14(1), 01–20. <https://doi.org/10.30591/monex.v14i1.6930>
- Wahyuni, W. (2018). Pengaruh Kesadaran Wajib Pajak, Pengetahuan, Sistem Adminitrasi Perpajakan Modern, dan Sanksi Pajak Terhadap Kepatuhan Perpajakan Pada Kantor Pelayanan Pajak Madya Makassar. *Bongaya Journal for Research in Accounting (BJRA)*, 1(2), 01–07. <https://doi.org/10.37888/bjra.v1i2.71>
- Wilestari, M., & Ramadhani, M. (2020). Pengaruh Pemahaman, Sanksi Perpajakan dan Tingkat Kepercayaan Pada Pemerintah Terhadap Kepatuhan Dalam Membayar PBB-P2. *AKRUAL : Jurnal Akuntansi dan Keuangan*, 2(1), 36–54. <https://doi.org/10.34005/akrual.v2i1.1043>
- Wiranata, I. G. A. P. (2024). Legal aspects of hotel tax collection using the online system in Badung District government. *Indonesian Journal of Multidisciplinary Science*, 3(12). <https://doi.org/10.55324/ijoms.v3i12.999>
- Wulandari, S., & Budiaji, A. (2018). Pengaruh persepsi keadilan pajak dalam peraturan pemerintah republik indonesia nomor 46 tahun 2013 terhadap kepatuhan dalam memenuhi kewajiban perpajakan. *ISLAMICONOMIC: Jurnal Ekonomi Islam*, 8(2). <https://doi.org/10.32678/ije.v8i2.71>