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Tax Administration Modernization in Moderating the Effects of Tax Service Quality, Tax Sanctions, and Taxpayer Awareness on Taxpayer Compliance

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Abstract

Taxpayer compliance is essential for strengthening state revenue, yet administrative challenges and the transition toward digital taxation create difficulties for taxpayers. This study examines the effects of tax service quality, tax sanctions, and taxpayer awareness on taxpayer compliance, while investigating the moderating role of tax administration modernization. A quantitative causal-comparative approach was employed using questionnaire data collected from corporate taxpayers registered with the East Java I Tax Office. Purposive sampling produced 152 valid responses from 170 distributed questionnaires. Data were analyzed using classical assumption tests and moderated regression analysis. The findings indicate that tax service quality, tax sanctions, and taxpayer awareness have positive and significant effects on taxpayer compliance. Tax administration modernization significantly strengthens the relationships between tax service quality and compliance and between tax sanctions and compliance. However, modernization negatively moderates the relationship between taxpayer awareness and compliance, suggesting that digital administrative challenges may hinder the translation of awareness into compliant behavior. The study concludes that modernization should be supported by reliable systems, accessible services, transparent enforcement, and responsive taxpayer assistance. These findings provide implications for improving digital tax administration and supporting compliance during technological transformation.

Keywords

Tax Administration Modernization, Tax Sanctions, Tax Service Quality, Taxpayer Awareness, Taxpayer Compliance.

1. Introduction

Taxation is a primary source of state revenue in Indonesia, supporting public expenditure and national development. However, revenue remains below the established target, partly highlighting the need to strengthen taxpayer awareness and compliance. Taxpayers may view taxes as a burden that reduces net profit, potentially encouraging legal or unlawful efforts to minimize tax liabilities. Therefore, compliance requires effective enforcement, adequate services, taxpayer awareness, and an efficient administrative system (Rahayu, 2017; Mardiasmo, 2020; Rachman et al., 2025). Tax administration modernization is thus essential to tax reform, particularly through information technology-based services that improve revenue, compliance, and administrative efficiency (Famami & Norsain, 2019).

The modernization process continued through Regulation of the Director General of Taxes Number PER-24/PJ/2021 concerning the Form and Procedures for Preparing Unified Withholding/Collection Certificates and the Form, Content, Completion Procedures, and Submission of Unified Periodic Income Tax Returns. Issued on December 28, 2021, the regulation became effective for the January 2022 tax period, with a transition period through April 2022. Beginning with the April 2022 tax period, taxpayers acting as income tax withholding or collection agents were required to use the unified electronic withholding certificate system (e-Bupot Unifikasi) and submit Unified Periodic Income Tax Returns through a single application. This development demonstrates the continued integration of information technology into tax administration (Direktorat Jenderal Pajak, 2021; Suartama, 2022).

A more recent transformation occurred on January 1, 2025, through the implementation of the Core Tax Administration System (CTAS), which replaced the previous tax administration system and integrated taxpayer registration, tax return filing, tax payments, and compliance monitoring into a single digital platform. This implementation reflects the Directorate General of Taxes' continued tax reform through digitalization and system integration. However, CTAS also encountered operational challenges. Despite a realized budget of IDR 977 billion, the system experienced bottlenecks, slow response times, and errors in tax reporting and data validation (Grehenson, 2025). In February 2025, tax revenue reached IDR 187.8 trillion, declining 30.2% from IDR 269.02 trillion in February 2024. Payment and tax return processing difficulties contributed to delays and unsuccessful transactions, highlighting challenges in the relationship between tax administration modernization and taxpayer compliance.

Tax service quality, tax sanctions, and taxpayer awareness may also influence taxpayer compliance. Service quality facilitates taxpayers in understanding and fulfilling their obligations, while sanctions function as an external mechanism to encourage compliance (Susanti & Suhono, 2020; Hidayat et al., 2024). Service reliability, responsiveness, and other dimensions of service quality can shape taxpayers' perceptions of tax services (Parasuraman et al., 1988). Meanwhile, taxpayer awareness and knowledge encourage voluntary compliance because taxpayers who understand their obligations are more likely to fulfil them. These behavioral factors are also consistent with the Theory of Planned Behavior, which explains that attitudes, subjective norms, and perceived behavioral control influence individual intentions and behavior (Ajzen, 1991).

Previous studies indicate that tax administration modernization can strengthen taxpayer compliance. Pratama and Urumsah (2024) examined tax administration modernization as a moderating variable in the relationship between tax-related factors and Micro, Small, and Medium Enterprises (MSME) taxpayer compliance. Lisdiana (2021) similarly examined its moderating role in the relationship between service quality and compliance, while Delia and Rachmat (2025) investigated

modernization as a moderator between awareness, tax knowledge, and MSMEs tax compliance. Hanania and Setijawan (2026) also demonstrated its relevance in moderating the effects of sanctions and taxpayer awareness. However, operational challenges and declining tax revenue during the initial CTAS implementation contrast with these generally positive findings. This creates a research gap regarding whether modernization consistently strengthens the effects of tax service quality, tax sanctions, and taxpayer awareness on compliance.

The novelty of this study lies in positioning tax administration modernization as a moderating variable rather than merely examining its direct effect on compliance. This study examines the effects of tax service quality, tax sanctions, and taxpayer awareness on taxpayer compliance and determines whether tax administration modernization moderates each relationship. This study contributes an integrated framework linking service quality, sanctions, awareness, and administrative modernization in explaining taxpayer compliance. The findings are expected to inform the Directorate General of Taxes (DGT) in evaluating tax administration modernization and identifying improvements needed to support taxpayer compliance during the CTAS transition.

2. Literature Review and Hypothesis Development

2.1. The Effect of Tax Service Quality on Taxpayer Compliance

Tax service quality refers to taxpayers' perceptions of the services provided by tax authorities, including the accuracy of information, responsiveness, accessibility, and courtesy of tax officers. High-quality tax services can facilitate taxpayers in fulfilling their obligations by reducing administrative difficulties and increasing their confidence in the taxation system. Parasuraman et al. (1988) conceptualized service quality through five dimensions: tangibles, reliability, responsiveness, assurance, and empathy. In the taxation context, these dimensions include the reliability of tax information, the responsiveness of tax officers, the clarity of procedures, and the accessibility of tax administration facilities. When tax services meet taxpayers' expectations, taxpayers may perceive the tax system as more supportive and trustworthy, thereby encouraging voluntary compliance (Heider, 1958).

The relationship between tax service quality and taxpayer compliance can also be explained through the Theory of Planned Behavior by Ajzen (1991), which emphasizes the role of attitudes, subjective norms, and perceived behavioral control in shaping individual behavior. Accessible and responsive tax services may strengthen taxpayers' perceived control over fulfilling their obligations. Empirically, Hidayat et al. (2024) found that tax service quality had a positive and significant effect on individual taxpayer compliance. Similarly, Subekti and Yuliana (2024) found that tax service quality positively affected taxpayer compliance, while Manurung and Ardillah (2024) reported a positive effect of tax service quality on individual taxpayer compliance. Amalia et al. (2023) also found that tax service quality influenced individual taxpayer compliance. Similarly, Widiastuti (2017) demonstrated that improved tax service quality was associated with higher taxpayer compliance, partly through taxpayer satisfaction. Therefore, effective tax services can encourage taxpayers to fulfil their obligations accurately and on time.

H1: Tax service quality has a positive effect on taxpayer compliance.

2.2. The Effect of Tax Sanctions on Taxpayer Compliance

Tax sanctions are legal consequences imposed on taxpayers who fail to fulfil their tax obligations in accordance with applicable regulations. They may include administrative penalties, such as fines and interest, as well as criminal sanctions for serious violations. The implementation of tax sanctions is intended to discourage

non-compliant behavior and encourage taxpayers to meet their payment and reporting obligations. According to Mardiasmo (2020), sanctions represent an important instrument for ensuring that tax regulations are implemented effectively. The impact of sanctions depends not only on their severity but also on their clarity, fairness, and consistency of enforcement. When taxpayers perceive that violations can be detected and punished, they may be more likely to comply with tax regulations.

Tax sanctions can also influence taxpayer behavior by increasing the perceived consequences of non-compliance. Hidayat et al. (2024) found that tax sanctions had a positive and significant effect on individual taxpayer compliance. This finding is consistent with Susanti and Suhono (2020), who reported that tax sanctions contributed positively to taxpayer compliance. Similarly, Adi et al. (2022) reported that tax sanctions significantly influenced taxpayer compliance. Furthermore, Wea (2022) indicated that tax sanctions and taxpayer awareness were relevant factors in encouraging individual taxpayers to fulfil their obligations. Wahyuni et al. (2023) found that tax sanctions had a positive effect on individual taxpayer compliance. Nevertheless, sanctions should be implemented transparently and proportionately to maintain public trust and avoid perceptions of unfair treatment. Accordingly, consistent enforcement of tax sanctions is expected to encourage taxpayers to comply with applicable tax regulations.

H2: Tax sanctions have a positive effect on taxpayer compliance.

2.3. The Effect of Taxpayer Awareness on Taxpayer Compliance

Taxpayer awareness refers to taxpayers' understanding of their tax obligations and their willingness to fulfil those obligations voluntarily. It involves recognizing the importance of taxation, understanding applicable regulations, and acknowledging that tax payments contribute to public services and national development. Mardiasmo (2020) explains that taxpayer awareness is reflected in the voluntary fulfilment of tax obligations without coercion. From the perspective of the Theory of Planned Behavior, awareness can contribute to the formation of positive attitudes toward tax compliance by shaping taxpayers' beliefs about their responsibilities and the consequences of their actions (Ajzen, 1991). Taxpayers who understand the purpose of taxation and the importance of complying with regulations may be more willing to pay taxes and report their tax liabilities accurately.

Taxpayer awareness represents an internal factor that may encourage compliance independently of external enforcement mechanisms. Taxpayers with adequate awareness are more likely to recognize payment deadlines, understand reporting requirements, and take responsibility for fulfilling their obligations. Hidayat et al. (2024) found that taxpayer awareness had a positive and significant effect on taxpayer compliance. Setiawan et al. (2022) similarly found that taxpayer awareness had a positive and significant effect on individual taxpayer compliance. Putri and Setiawan (2024) support this finding, identifying taxpayer awareness as an important factor influencing compliance. Rivanda and Dwiastuti (2024) examined taxpayer awareness and tax administration modernization as determinants of corporate taxpayer compliance. These findings suggest that increasing awareness through tax education, accessible information, and effective communication may support voluntary compliance. Therefore, higher taxpayer awareness is expected to increase taxpayer compliance.

H3: Taxpayer awareness has a positive effect on taxpayer compliance.

2.4. Tax Administration Modernization as a Moderating Variable

Tax administration modernization refers to improvements in organizational structures, administrative procedures, human resources, and information technology intended to create a more efficient, transparent, and accountable taxation system (Mardiasmo, 2020). Modernization may improve the accessibility of tax services, simplify reporting procedures, strengthen data integration, and facilitate communication between tax authorities and taxpayers. Digital systems, including electronic reporting and integrated tax administration platforms, can reduce administrative barriers and support more consistent service delivery. From this perspective, modernization may strengthen the effect of tax service quality on compliance by enabling taxpayers to access accurate information and complete their obligations more conveniently. Lisdiana (2021) and Sukma (2023) found that modernization moderated the relationship between tax service quality and taxpayer compliance.

Modernization may also influence the effects of tax sanctions and taxpayer awareness. Integrated administrative systems can improve the recording of transactions, monitoring of reporting deadlines, and identification of potential violations, thereby strengthening the enforcement of tax sanctions. In addition, digital procedures may help taxpayers translate their awareness into actual compliance by simplifying administrative processes. However, the effectiveness of modernization depends on system reliability, usability, and adequate taxpayer guidance. Pratama and Urumsah (2024) and Delia and Rachmat (2025) examined modernization in relation to taxpayer awareness and compliance, highlighting its moderating role. Accordingly, modernization is expected to strengthen the relationships between tax service quality, tax sanctions, taxpayer awareness, and taxpayer compliance.

H4: Tax administration modernization moderates the relationship between tax service quality and taxpayer compliance.

H5: Tax administration modernization moderates the relationship between tax sanctions and taxpayer compliance.

H6: Tax administration modernization positively moderates the relationship between taxpayer awareness and taxpayer compliance.

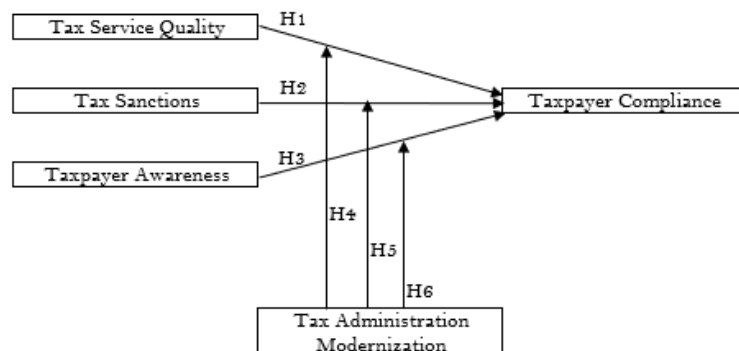


Figure 1. Conceptual Framework

Figure 1 illustrates the conceptual framework examining the effects of tax service quality, tax sanctions, and taxpayer awareness on taxpayer compliance, with tax administration modernization positioned as a moderating variable. The framework proposes that these three factors directly influence taxpayer compliance, while tax administration modernization strengthens or weakens their relationships with taxpayer compliance.

3. Methods

This study employed a quantitative causal-comparative research design to examine the effects of tax service quality, tax sanctions, and taxpayer awareness on taxpayer compliance, as well as the moderating effect of tax administration modernization. A quantitative approach was used because the proposed relationships were empirically tested using numerical data collected through a structured questionnaire (Sugiyono, 2016). The study population comprised 438 corporate taxpayers registered with the East Java I Regional Tax Office in 2025. Respondents were selected using purposive sampling based on predetermined eligibility criteria: being corporate taxpayers registered with the East Java I Regional Tax Office and being formally registered as Taxable Entrepreneurs (*Pengusaha Kena Pajak*/PKP). Questionnaires were distributed to 170 eligible taxpayers, of whom 152 completed the questionnaire and were included in the analysis.

Primary data were collected through a structured questionnaire distributed using Google Forms. The questionnaire was adapted from instruments developed by Sinaga et al. (2022) and Violeta (2023). All research constructs were measured using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree), consisting of strongly agree (5), agree (4), neither agree nor disagree (3), disagree (2), and strongly disagree (1). Data were analyzed using IBM Statistical Package for the Social Sciences (SPSS) Statistics. The analysis comprised classical assumption tests and moderated regression analysis. Classical assumption testing included tests for residual normality, multicollinearity, and heteroscedasticity. Residual normality was assessed using the Kolmogorov-Smirnov test and a normal probability plot, with residuals considered normally distributed when the Kolmogorov-Smirnov significance value exceeded 0.05 and the observations followed the diagonal line. Multicollinearity was assessed using tolerance and Variance Inflation Factor (VIF) values, with tolerance above 0.10 and VIF not exceeding 10 indicating the absence of multicollinearity. Heteroscedasticity was examined using a scatterplot of standardized residuals, with a random distribution of points above and below zero indicating the absence of heteroscedasticity.

Hypotheses were tested using moderated regression analysis to examine the effects of tax service quality, tax sanctions, and taxpayer awareness on taxpayer compliance and the moderating role of tax administration modernization. Model feasibility was evaluated using the F-test at a 0.05 significance level. Partial effects were evaluated using the t-test at a 0.05 significance level. A hypothesis was considered supported when the relevant regression coefficient had a significance value of 0.05 or lower, and its direction was consistent with the proposed hypothesis.

4. Results

Classical assumption tests were conducted to determine whether the assumptions required for multiple linear regression analysis had been satisfied. These tests ensured the validity of the regression results. The classical assumption tests used in this study comprised normality, multicollinearity, and heteroscedasticity tests.

Table 1. Normality Test Results

Test Parameter	Unstandardized Residual
N	152
Mean	0.0000000
Std. Deviation	0.05291624
Absolute	0.087
Positive	0.063
Negative	-0.087
Kolmogorov-Smirnov Z	1.073
Asymp. Sig. (2-tailed)	0.200

Table 1 presents the results of the normality test conducted on the unstandardized residuals using the Kolmogorov–Smirnov test. The analysis was based on 152 observations, with a mean residual of 0.000000 and a standard deviation of 0.05291624. The Kolmogorov–Smirnov statistic was 1.073, with an Asymp. Sig. (2-tailed) value of 0.200. Since the significance value exceeds the commonly used threshold of 0.05, the residuals can be considered normally distributed. This result indicates that the normality assumption required for regression analysis is satisfied. The normal distribution of residuals supports the reliability of subsequent statistical analyses, including hypothesis testing and model evaluation.

Table 2. Multicollinearity Test Results

Variable	B	Std. Error	t	Sig.	Tolerance	VIF
Constant	0.003	0.079	0.043	0.966	-	-
Tax Service Quality	0.278	0.054	5.162	0.000	0.833	1.201
Tax Sanctions	0.456	0.050	9.073	0.000	0.988	1.012
Taxpayer Awareness	0.277	0.045	6.186	0.000	0.842	1.188

Table 2 shows the results of the multicollinearity test examining the relationships among the independent variables: tax service quality, tax sanctions, and taxpayer awareness. The assessment is based on the Tolerance and VIF values. Tax service quality has a tolerance value of 0.833 and a VIF of 1.201, while tax sanctions has a tolerance value of 0.988 and a VIF of 1.012. Taxpayer awareness records a tolerance value of 0.842 and a VIF of 1.188. All tolerance values exceed 0.10, and all VIF values are below 10, indicating that the regression model does not experience multicollinearity. These findings suggest that the independent variables do not exhibit problematic linear relationships that could distort the regression coefficients.

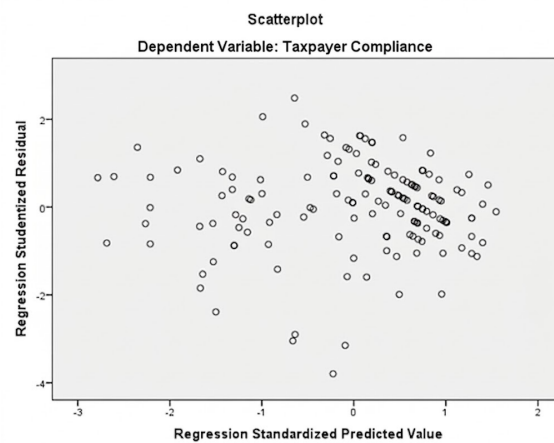


Figure 2. Heteroscedasticity Test Results

Homoscedasticity occurs when residual variance remains constant across observations, indicating the absence of heteroscedasticity, an important assumption in regression analysis. The presence of heteroscedasticity was assessed using a scatterplot generated by SPSS, where heteroscedasticity is indicated by a discernible pattern in the plotted points, such as a widening and narrowing distribution. Conversely, heteroscedasticity is not indicated when the points are randomly distributed above and below zero on the Y-axis without a discernible pattern. As shown in Figure 2, the plotted points were randomly distributed above and below zero on the Y-axis and did not form a discernible pattern. These results indicate that the regression model did not exhibit heteroscedasticity, thereby satisfying the homoskedasticity assumption.

Table 3. Hypothesis Testing Results

Variable	B	Std. Error	Beta	t	Sig.
Constant	0.081	0.034	—	2.406	0.017
Tax Service Quality → Taxpayer Compliance	0.304	0.033	0.347	9.115	0.000
Tax Sanctions → Taxpayer Compliance	0.454	0.031	0.519	14.735	0.000
Tax Awareness → Taxpayer Compliance	0.256	0.038	0.293	6.752	0.000
Tax Service Quality*Tax Administration Modernization → Taxpayer Compliance	0.091	0.033	0.116	2.728	0.007
Tax Sanctions*Tax Administration Modernization → Taxpayer Compliance	0.081	0.032	0.090	2.529	0.013
Tax Awareness*Tax Administration Modernization → Taxpayer Compliance	-0.215	0.031	-0.332	-7.017	0.000

Table 3 presents the results of hypothesis testing examining the effects of tax service quality, tax sanctions, and tax awareness on taxpayer compliance, as well as the moderating role of tax administration modernization. The results indicate that tax service quality has a positive and significant effect on taxpayer compliance ($B = 0.304$, $\beta = 0.347$, $t = 9.115$, $p < 0.001$). Similarly, tax sanctions positively and significantly influence taxpayer compliance ($B = 0.454$, $\beta = 0.519$, $t = 14.735$, $p < 0.001$). Tax awareness also demonstrates a positive and significant effect ($B = 0.256$, $\beta = 0.293$, $t = 6.752$, $p < 0.001$). These findings suggest that improvements in tax service quality, the implementation of tax sanctions, and taxpayer awareness are associated with increased taxpayer compliance.

The moderation results reveal that tax administration modernization significantly moderates the relationship between the independent variables and taxpayer compliance. The interaction between tax service quality and tax administration modernization is positive and significant ($B = 0.091$, $p = 0.007$), as is the interaction between tax sanctions and tax administration modernization ($B = 0.081$, $p = 0.013$). In contrast, the interaction between tax awareness and tax administration modernization is negative and significant ($B = -0.215$, $p < 0.001$). These results indicate that tax administration modernization changes the relationships between the respective predictors and taxpayer compliance. However, interpreting the direction and magnitude of moderation requires further analysis, such as a simple slope test, to establish how modernization influences each relationship across different levels of the moderating variable.

Table 4. Model Feasible Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	95.447	6	15.908	115.337	0.000 ^b
Residual	19.999	145	0.138	-	-
Total	115.446	151	-	-	-

Table 4 presents the results of the F-test (ANOVA) conducted to assess the overall feasibility of the regression model in explaining taxpayer compliance. The analysis shows that the regression sum of squares is 95.447, with 6 degrees of freedom and a mean square of 15.908. The calculated F-value is 115.337, with a significance value of 0.000 ($p < 0.001$). Since the significance value is below the 0.05 threshold, the regression model is statistically significant. This finding indicates that tax service quality, tax sanctions, tax awareness, and their interactions with tax administration modernization collectively have a significant relationship with taxpayer compliance.

The residual sum of squares is 19.999, with 145 degrees of freedom and a mean square of 0.138, while the total sum of squares is 115.446. The significant F-test result shows that the independent variables and moderation terms jointly explain variation in taxpayer compliance. Therefore, the proposed regression model is

feasible for further analysis and interpretation of the relationships among the research variables. However, the F-test evaluates the overall significance of the model and does not independently establish the significance or direction of each hypothesis.

5. Discussion

Tax service quality positively influences taxpayer compliance. Prompt services, accurate information, courteous tax officials, accessible facilities, and transparent procedures make it easier for taxpayers to understand and fulfil their obligations. This finding is consistent with the Theory of Planned Behavior, which explains that attitudes and perceived behavioral control influence an individual's intention to perform a particular behavior (Ajzen, 1991). Positive experiences with tax services can improve taxpayers' attitudes toward the taxation system and strengthen their perceived ability to comply. The finding supports Widiastuti (2017), who found that better tax service quality is associated with higher compliance, and Hidayat et al. (2024), who identified service quality as an important factor affecting taxpayer compliance. It is also consistent with the service quality dimensions proposed by Parasuraman et al. (1988), particularly reliability and responsiveness. Thus, accessible and responsive tax services can facilitate both taxpayers' willingness and ability to comply.

Tax sanctions also positively influence taxpayer compliance. Clear and consistently enforced sanctions can discourage taxpayers from delaying payments, submitting inaccurate information, or neglecting reporting obligations. This finding is consistent with Deterrence Theory, which suggests that individuals tend to avoid violations when sanctions are perceived as certain and enforceable. Taxpayers may consider the potential financial and legal consequences of non-compliance when deciding whether to fulfil their obligations. The result supports Susanti and Suhono (2020), who found that tax sanctions contribute to taxpayer compliance. Wea (2022) similarly identified sanctions as an important factor in encouraging compliance. Nevertheless, sanctions should be proportionate, transparent, and fairly administered to maintain taxpayers' trust in tax authorities.

Taxpayer awareness positively influences taxpayer compliance. Taxpayers who understand the function of taxation and recognize its contribution to public services are more likely to fulfil their obligations voluntarily. Awareness encourages compliance through knowledge, moral responsibility, and willingness rather than solely through supervision or fear of punishment. This factor is particularly important under a self-assessment system, where taxpayers are responsible for calculating, paying, and reporting their tax liabilities. The finding is consistent with Hidayat et al. (2024), who found that taxpayer awareness contributes to compliance, and Putri and Setiawan (2024), who identified awareness as an important internal factor supporting compliant behavior. Perdana and Dwirandra (2020) also emphasized the relevance of tax knowledge and awareness in explaining compliance. Therefore, strengthening taxpayer understanding and awareness can support voluntary compliance.

Tax administration modernization strengthens the positive effect of tax service quality on taxpayer compliance. Modernization enables services to be delivered through more accessible, integrated, and efficient administrative channels. Digital tax services can reduce physical visits, simplify procedures, improve access to information, and facilitate the completion of tax obligations. This finding is consistent with Lisdiana (2021), who found that tax service quality moderates the relationship between tax administration modernization and taxpayer compliance. It also corresponds with Widiastuti (2017), who linked service quality with compliance, while Parasuraman et al. (1988) emphasized the importance of reliable and responsive service delivery. In practice, modernization can strengthen quality

services when supported by reliable information systems and simple digital procedures. Therefore, technological improvements should be paired with responsive human support to address taxpayers' administrative and informational needs.

Tax administration modernization strengthens the positive effect of tax sanctions on taxpayer compliance by improving transaction recording, monitoring reporting deadlines, identifying inconsistencies, and notifying outstanding obligations. These capabilities increase the perceived certainty of violation detection and sanction enforcement, supporting compliance. This finding is consistent with Pratama and Urumsah (2024), who examined the role of modernization in strengthening the relationship between tax sanctions and compliance. However, technology-based enforcement should remain transparent and supported by accessible objection mechanisms. In contrast, modernization weakens the positive relationship between taxpayer awareness and compliance, suggesting that awareness contributes less as administrative systems become more automated. This may result from technical errors, unfamiliar procedures, or limited guidance that prevent awareness from translating into actual compliance. Delia and Rachmat (2025) examined modernization as a moderator of awareness and compliance, while Lisdiana (2021) emphasized the importance of service quality in modernized systems. Therefore, tax authorities should improve system reliability, simplify digital procedures, and provide responsive assistance to ensure modernization supports effective compliance.

6. Conclusion

This study examined the effects of tax service quality, tax sanctions, and taxpayer awareness on taxpayer compliance, as well as the moderating role of tax administration modernization. The results demonstrate that all three independent variables have positive and significant effects on taxpayer compliance. These findings indicate that responsive services, consistent sanctions, and taxpayer awareness contribute to the fulfilment of tax obligations. Furthermore, tax administration modernization strengthens the positive relationships between tax service quality and compliance and between tax sanctions and compliance. However, its interaction with taxpayer awareness is negative and significant, indicating that modernization may weaken the translation of awareness into actual compliance. The findings extend the understanding of taxpayer compliance by positioning modernization as a contextual factor that produces different effects across behavioral and administrative determinants.

The study provides practical implications for tax authorities, particularly the Directorate General of Taxes, to improve system reliability, simplify digital procedures, strengthen information accuracy, and provide responsive assistance. Tax enforcement should remain transparent, proportionate, and supported by accessible objection mechanisms. Nevertheless, this study has limitations. Its respondents were limited to 152 corporate taxpayers registered with the East Java I Tax Office and were selected through purposive sampling, which restricts the generalizability of the findings. The cross-sectional design and questionnaire-based data may also limit the ability to capture changes in taxpayer behavior over time. Future research should involve larger and more diverse samples, longitudinal approaches, and comparative studies across regions and taxpayer categories. Further studies may also apply simple slope analysis and examine system usability, digital literacy, and taxpayer trust to clarify the negative moderating effect of modernization.

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