

THE EFFECT OF TAX KNOWLEDGE, TAX AWARENESS, AND TAX SANCTIONS ON THE TAX COMPLIANCE OF INDIVIDUAL TAXPAYERS (CASE STUDY OF MICRO ENTREPRENEURS REGISTERED WITH THE JAKARTA KRAMAT JATI TAX OFFICE)

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Abstract

This study aims to analyse the effect of taxation knowledge, taxpayer awareness, and taxation sanctions on the compliance of individual taxpayers who are microbusiness owners registered with the Kramat Jati Tax Office. A quantitative approach was used in this study. The population in this study included microbusiness owners in the Kramat Jati area. The sample was determined using the G*Power application with a minimum result of 123 respondents, but the actual number obtained was 130 respondents. Primary data was collected through questionnaires distributed both directly and online via Google Form. Data analysis was performed using the Partial Least Squares (PLS) approach, including descriptive analysis, evaluation of the outer and inner models, and hypothesis testing using SmartPLS software. The study results indicate that tax knowledge affects the compliance of individual taxpayers. Tax awareness affects the compliance of individual taxpayers. Tax sanction affects the compliance of individual taxpayers.

Keywords: *Tax Knowledge; Tax Awareness; Tax Sanction; Tax Compliance of Individual Taxpayers; SEMPLS*

1. Introduction

As a developing country, Indonesia continues to rely on taxes as the primary source of development funding. Taxes play a crucial role in supporting improvements in public service quality, law enforcement, and national economic growth (Yulia et al., 2020). However, the level of compliance among individual taxpayers, particularly in reporting annual tax returns, remains suboptimal. Data from the Directorate General of Taxes show that in 2023, out of 19.4 million registered taxpayers, only 17.1 million submitted their Annual Tax Returns (SPT), resulting in a formal compliance rate of 88% (Tirto.id, 2024). Although this figure represents the highest rate in the past five years, approximately 2.3 million taxpayers have still not fulfilled their tax obligations.

Implementing a self-assessment system, which requires taxpayers to calculate, pay, and report their own taxes, is considered efficient. However, it also presents challenges due to the public's limited understanding of taxation regulations. This issue is particularly evident among micro-businesses that have not received adequate education and guidance on taxation (Tirto.id, 2024). In fact, the micro-business sector plays a strategic role in the economy through job creation, regional development, and contributions to state revenue (Oktaviani et al., 2023).

Table 1
Compliance Rate of the Jakarta Kramat Jati Tax Office (2019–2021)

Year	Number of Registered Taxpayers	Number Reporting tax returns	Compliance percentage (%)
2019	59.874	37.876	63%
2020	62.586	38.208	61%
2021	64.116	39.343	61%

Source: Journal by (Oktaviani et al., 2023)

Based on data from the Jakarta Kramat Jati Tax Office, the number of micro-business taxpayers increased from 59,874 in 2019 to 64,116 in 2021. However, the tax return compliance rate decreased from 63% in 2019 to 61% in 2020 and remained stagnant until (Oktaviani et al., 2023). This indicates that although the number of taxpayers continues to grow, it is not accompanied by a corresponding increase in compliance. Obstacles such as the complexity of reporting, limited understanding of taxation, and low taxpayer awareness remain the main contributing factors.

Tax knowledge, taxpayer awareness, and tax sanctions are factors that have the potential to influence taxpayer compliance. Several studies have stated that tax knowledge positively affects compliance (Wibowo et al., 2022; Karlinah et al., 2024; Puspodelwanti & Susanti, 2021), as does taxpayer awareness (Anggadini & Bramasto, 2022; Melilinda et al., 2024; Andi & Widyastuti, 2021; Nitasari et al., 2023), and tax sanctions (Amah et al., 2021; Harto, 2021; Yuliatic & Fauzi, 2020). However, some studies have found different results. For example, tax knowledge does not always have an effect (Sianturi, 2022), awareness does not affect compliance (Sata et al., 2022; Karneldi & Hidayatulloh, 2019; Taing & Chang, 2021), and tax sancation do not effect compliance (Oktaviani et al., 2023; Widyanti et al., 2021; Supriatiningsih & Jamil, 2021; Khodijah et al., 2021).

2. Literature Review

2.1 Theory Of Planned Behavior

The rapid pace of technological advancement has led to a heightened demand for The Theory of Planned Behavior (TPB) by Ajzen (1991) explains that an individual's intention is the main factor determining behavior, which is influenced by three components: attitude toward the behavior, subjective norms, and perceived behavioral control. In the context of taxation, tax knowledge shapes positive attitudes toward compliance, and taxpayer awareness reflects social and moral standards in fulfilling obligations. In contrast, tax sanctions reinforce self-control through the existence of legal consequences for non-compliance. Thus, knowledge, awareness, and tax sanctions are essential factors in line with the TPB framework, as all three contribute to shaping the intentions and compliance behavior of individual taxpayers. This framework provides a theoretical basis for understanding the factors that influence tax compliance, as well as a foundation for formulating policies to improve compliance.

2.2 Taxation Knowledge

Tax knowledge refers to a taxpayer's understanding of tax rules, rights, and obligations, including how to calculate, pay, and report taxes in accordance with applicable regulations. This knowledge plays a crucial role in promoting compliance, as the better an individual's understanding, the more likely they are to fulfill their tax obligations in a timely, lawful, and responsible manner. Conversely, a lack of tax knowledge increases the risk of administrative and substantive violations. Several studies have supported the significant role of tax knowledge in influencing taxpayer compliance. Wibowo et al. (2022), Hardika et al. (2021), and Timothy and Abbas (2021) found that tax knowledge has a positive and significant effect on individual taxpayer compliance. This finding confirms that tax knowledge is one of the key factors shaping compliant behavior, particularly among micro-business taxpayers in fulfilling their fiscal obligations optimally and sustainably.

Based on the above description, the following hypothesis can be formulated :

H1: Tax knowledge affects the compliance of individual taxpayers.

2.3 Tax Awareness

Tax awareness reflects the public's understanding and willingness to pay taxes with a positive attitude as a form of participation in national development. A high level of awareness encourages timely and compliant tax payments. In contrast, low awareness, which is often influenced by a lack of knowledge and trust in the government, can lead to non-compliance or violations. For individual taxpayers (WPOP) who are micro-business owners at the Jakarta Kramat Jati Tax Office, this awareness is crucial to ensure that fiscal obligations are fulfilled correctly and sustainably while strengthening integrity and supporting a fair and transparent taxation system. Several studies reinforce this view. Anggadini and Bramasto (2022), Andi and Widyastuti (2021), and Nitasari et al. (2023) found that taxpayer awareness has a positive and significant effect on individual taxpayer compliance. This indicates that the higher the level of awareness, the greater the likelihood of achieving tax compliance.

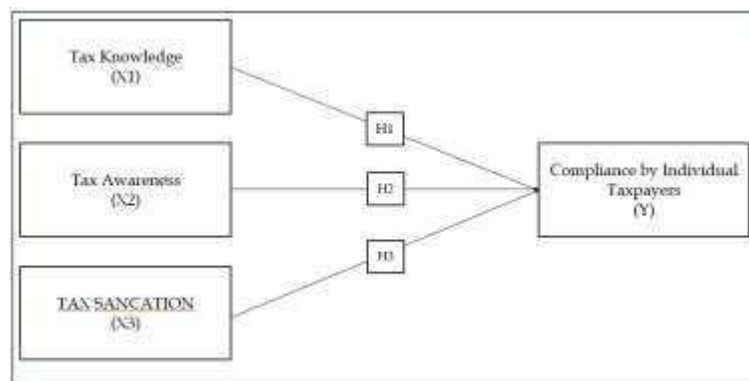
Based on the above description, the following hypothesis can be formulated :

H2: Taxpayer awareness affects the compliance of individual taxpayers.

2.4 Tax Sanctions

Tax sanctions are legal measures imposed on taxpayers who violate tax regulations, whether intentionally or unintentionally, in the form of administrative fines, late payment interest, or even criminal penalties. The purpose of these sanctions is to create a deterrent effect, increase compliance, and maintain fairness within the taxation system. For individual taxpayers (WPOP) who are micro-business owners at the Jakarta Kramat Jati Tax Office, sanctions play an important role in promoting discipline and ensuring that tax obligations are fulfilled in an orderly and timely manner. The taxpayer's understanding and consistency greatly influence the effectiveness of sanctions in law enforcement. Several studies support this view. Amah et al. (2021), Harto (2021), and Yuliatik and Fauzi (2020) found that tax sanctions have a positive and significant effect on the compliance of individual taxpayers. These findings confirm that penalties are an essential instrument in regulating and shaping taxpayer compliance behavior.

Based on the above description, the following hypothesis can be formulated:
H3: Tax sanctions affect the compliance of individual taxpayers.



In summary, and in line with previous studies, the relationship between tax knowledge, taxpayer awareness, tax sanctions, and individual taxpayer compliance is illustrated in Figure 1.

3. Material and Method

This study employs a quantitative approach. The quantitative approach is used to systematically examine phenomena through the measurement of variables and the analysis of relationships among the components under study. In quantitative research, the measurement process plays a crucial role as it serves as a bridge between observational data and the mathematical representation of the relationships among the studied variables (Siyoto and Odik, 2015:49).

3.1 Material Study

This study utilized a quantitative approach with a population consisting of all individual taxpayers (WPOP) who are micro-business owners registered at the Jakarta Kramat Jati Tax Office. The sample was determined using purposive sampling based on specific criteria relevant to the research objectives. The minimum number of respondents was set at 123, calculated using the G*Power application with the following configuration: two-tailed test, significance level of 0.05, power of 0.80, and an estimated correlation coefficient of 0.25. This

technique was chosen to ensure a representative sample and to detect significant relationships among the studied variables.

This study uses independent variables, namely tax knowledge (X1), taxpayer awareness (X2), and tax sanctions (X3), as well as a dependent variable, namely individual taxpayer compliance (Y).

3.1.1 Individual Taxpayer Compliance (Y)

Tax compliance refers to a condition in which taxpayers fulfill their tax obligations in accordance with applicable regulations, including registration, reporting, and payment of taxes correctly and on time (Mawaddah et al., 2023).

Indicators:

- Compliance in registering as a taxpayer.
- Compliance in submitting tax returns on time.
- Compliance in paying income tax on time.
- Compliance in settling tax arrears in accordance with the provisions.

3.1.2 Tax Knowledge (X1)

Tax knowledge refers to the level of understanding that taxpayers possess regarding applicable tax regulations, procedures, functions, and sanctions. The higher the level of knowledge, the greater the tendency to comply (Mawaddah et al., 2023).

Indicators:

- Knowledge of tax functions.
- Knowledge of tax payment provisions and procedures.
- Knowledge of tax sanctions.
- Knowledge of tax payment locations or channels.

3.1.3 Taxpayer Awareness (X2)

Taxpayer awareness is an individual's ability to understand and recognize the importance of taxes as an obligation that must be fulfilled to support national development (Oktaviani et al., 2023).

Indicators:

- Awareness that taxes support national development.
- Awareness that taxes are determined based on government policy.
- Awareness that paying taxes is an obligation.
- Awareness of the importance of paying taxes on time without reminders.

3.1.4 Tax Sanctions (X3)

Tax sanctions are legal instruments imposed on taxpayers who violate tax regulations, in the form of administrative or criminal penalties, aimed at fostering discipline and encouraging compliance (Oktaviani et al., 2023).

Indicators:

- Taxpayer discipline through the application of sanctions.
- Strictness of sanctions for tax violations.
- Appropriateness of sanctions in relation to the level of violation.

- Application of sanctions in accordance with tax regulations.

3.2 Data Analysis

After developing the research instrument, the next step was to distribute the questionnaire online through interviews. Once the required number of samples was obtained, the data were analyzed using the SEM-PLS (Structural Equation Modeling – Partial Least Squares) method with the assistance of SmartPLS 4.0 software.

3.2.1 Descriptive Statistical Analysis

Descriptive analysis is a statistical method used to provide a clear, organized, and objective description of the characteristics of the research object (Amruddin, 2019:128). This analysis is based on variable data obtained from predetermined respondents to provide an initial understanding of the patterns, trends, and distribution of the studied data. Descriptive statistical analysis uses specific statistical measures to describe or explain research data, including the mean, standard deviation, variance, maximum and minimum values, total, range, kurtosis (the degree of peakedness of the distribution), and skewness (the degree of asymmetry of the distribution). This analysis provides an overview of the distribution and characteristics of the data obtained from respondents (Ghozali, 2018:19).

3.2.2 Outer Model

The outer model is used to test the validity and reliability of the research instrument. Convergent validity was assessed using outer loading values (> 0.70) and Average Variance Extracted (AVE) values (> 0.50), while discriminant validity was tested using the Heterotrait-Monotrait Ratio (HTMT) with a threshold of < 0.85 . The reliability of the instrument was determined using Cronbach's Alpha and Composite Reliability, both of which should exceed 0.70 (Hair et al., 2019).

3.2.3 Inner Model

The inner model is used to test the relationships among latent variables. The assessment includes evaluating R-square values ($0.75 = \text{strong}$, $0.50 = \text{moderate}$, $0.25 = \text{weak}$), testing for multicollinearity using the Variance Inflation Factor ($\text{VIF} < 5$), and conducting hypothesis testing by examining the t-statistics (> 1.96) and p-values (< 0.05) as indicators of statistical significance (Hair et al., 2019).

4. Result

4.1 Overview of the Research Object

The research object in this study is Individual Taxpayers (WPOP) who are micro-business owners registered at the Jakarta Kramat Jati Tax Office, a unit under the East Jakarta Regional Tax Office, which is responsible for providing tax services, supervision, and consultation. A total of 130 respondents were successfully collected, exceeding the minimum sample requirement of 123 respondents, indicating that the data obtained were adequate for analysis. The characteristics of the respondents show that the majority are female (61%), aged over 40 years (45.5%), have a high school or vocational school education (78%), and have been engaged in business for 1–3 years (44.7%). This diversity in respondent characteristics

represents a reliable and representative profile of individual taxpayers and is relevant to the research objectives. To examine the relationships between latent variables, the analysis included the assessment of R-square (R^2) values where 0.75 indicates a strong model, 0.50 indicates a moderate model, and 0.25 indicates a weak model as well as multicollinearity testing using the Variance Inflation Factor ($VIF < 5$). Hypothesis testing was performed by evaluating t-statistics (> 1.96) and p-values (< 0.05) as indicators of statistical significance.

4.2 Data Processing Results

4.2.1 Descriptive Statistical Test

Variabel	N	Mean	Min	Max	Standard Deviaton	Skewness
CIT (Y)	130	3,883	1	5	1,068	-0,520
TK (X1)	130	3,838	1	5	1,042	-0,534
TA (X2)	130	3,806	1	5	1,045	-0,574
TS (X3)	130	3,521	1	5	1,165	-0,524

Table 1. Descriptive Statistical Test

The results of the descriptive analysis show that all research variables fall into the good category with a normal data distribution. The individual taxpayer compliance variable has an average value of 3.883, reflecting a relatively high level of compliance. The tax knowledge variable obtained an average value of 3.838, indicating that respondents' understanding of taxation is quite good. The tax awareness variable has an average value of 3.806, suggesting that the level of awareness is also in the good category. Meanwhile, the tax penalty variable recorded an average value of 3.521, which is the lowest among all variables, but still above the midpoint of the scale, indicating that respondents perceive tax penalties as important in influencing compliance behavior. The standard deviation values for all variables were within reasonable limits, showing that the data variation was acceptable. In addition, the skewness values for all variables tended to be negatively skewed (to the left) but remained within the acceptable range of a normal distribution. Therefore, the data were considered suitable for further analysis.

4.2.2 Outer Model

- **Reliability Test**

Variabel	Cronbach's Alpha	Composite Reliability
Compliance of Individual Taxpayers (Y)	0,825	0,830
Tax Knowledge (X1)	0,857	0,870
Taxpayer Awareness (X2)	0,891	0,891

Tax Sanctions (X3)	0,898	0,899
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Table 2. Reliability Test

The reliability test results show that all research variables met the required standards, with both Cronbach's Alpha and Composite Reliability values exceeding 0.70. The individual taxpayer compliance (Y) variable obtained a Cronbach's Alpha value of 0.825 and a Composite Reliability of 0.830. The tax knowledge (X1) variable recorded values of 0.857 and 0.870, the tax awareness (X2) variable recorded 0.891 and 0.891, and the tax penalty (X3) variable recorded 0.898 and 0.899, respectively. These results confirm that all indicators used in the study are reliable, consistent, and dependable for measuring the research variables accurately.

- **Convergent Validity Test**

Variabel	AVE
Compliance of Individual Taxpayers (Y)	0,765
Tax Knowledge (X1)	0.655
Taxpayer Awareness (X2)	0.702
Tax Sanctions (X3)	0.754

Table 3. Convergent Validity Test

The results of the convergent validity test indicate that all constructs in this study meet the required criteria, with all Average Variance Extracted (AVE) values exceeding 0.50. The individual taxpayer compliance (Y) variable recorded an AVE of 0.765, tax knowledge (X1) obtained 0.655, taxpayer awareness (X2) reached 0.702, and tax sanctions (X3) achieved 0.754. These results confirm that each construct demonstrates satisfactory convergent validity, indicating that the indicators effectively represent their respective variables

- **Discriminant Validity Test**

Variabel	TK	TA	TS	CIT
TK				
TA	0,796			
TS	0,620	0,844		
CIT	0,846	0,845	0,782	

Table 4. Discriminant Validity Test

The Heterotrait-Monotrait (HTMT) results indicate that all variables in this study meet the criteria for discriminant validity, with all HTMT values below the 0.85 threshold. Specifically, the HTMT values between tax knowledge (X1) and taxpayer awareness (X2), tax sanctions (X3), and individual taxpayer compliance (Y) are 0.796, 0.620, and 0.846, respectively. Meanwhile, the relationships between taxpayer awareness (X2) and tax sanctions (X3), as well as individual taxpayer compliance (Y), recorded 0.844 and 0.845, and between tax sanctions (X3) and individual taxpayer compliance (Y) was 0.782. These results confirm that all

constructs possess adequate discriminant validity, reflecting the distinctiveness and reliability of each variable for further structural analysis.

4.2.3 Inner Model

- R Square

Variabel	<i>R-square adjusted</i>
Compliance of Individual Taxpayers (Y)	0,689

Table 4. R Square

Based on the results of the adjusted R-square test, the independent variables in this study tax knowledge, taxpayer awareness, and tax sanctions explain 68.9% of the variance in individual taxpayer compliance (Y). This indicates that 68.9% of the changes in taxpayer compliance can be attributed to these three variables, while the remaining 31.1% is influenced by other factors outside the research model. These findings demonstrate that the model possesses a strong predictive capability, making it appropriate for explaining the effect of the independent variables on individual taxpayer compliance.

- Multicollinearity Test (VIF)

Variabel	VIF
Tax Knowledge -> Compliancel of Individual Taxpayers	1.908
Taxpayer Awareness -> Compliancel of Individual Taxpayers	2.99
Tax Sanctions -> Compliancel of Individual Taxpayers	2.238

Table 4. Multicollinearity Test (VIF)

The table above presents the results of the multicollinearity test, as indicated by the Variance Inflation Factor (VIF) values. All independent variables in this study have VIF values below 5, confirming the absence of multicollinearity. Specifically, the VIF values for Tax Knowledge, Taxpayer Awareness, and Tax Sanctions are 1.908, 2.990, and 2.238, respectively. These results indicate that no excessive linear correlation exists among the independent variables, meaning that each variable independently contributes to explaining variations in Individual Taxpayer Compliance. Therefore, the regression model in this study satisfies the no multicollinearity assumption

- Hypothesis Testing

Variabel	Original sample	Sample mean	Standard deviation	T statistics	P values	Hypothesis Results
Tax Knowledge (X1) -> Compliance of Individual Taxpayers (Y)	0,416	0,420	0,065	6,355	0,000	H1 Accepted
Taxpayer Awareness (X2) -> Compliance of Individual Taxpayers (Y)	0,241	0,236	0,084	2,858	0,004	H2 Accepted
Tax Sanctions (X3) -> Compliance of Individual Taxpayers (Y)	0,296	0,298	0,087	3,404	0,001	H3 Accepted

Table 4. Hypothesis Testing

Based on the hypothesis testing results, the following conclusions can be drawn:

1. Tax Knowledge significantly influences Individual Taxpayer Compliance, with a t-statistic of $6.355 > 1.96$ and a p-value of $0.000 < 0.05$. Thus, H1 is accepted.
2. Taxpayer Awareness has a significant effect on Individual Taxpayer Compliance, with a t-statistic of $2.858 > 1.96$ and a p-value of $0.004 < 0.05$. Therefore, H2 is accepted.
3. Tax Sanctions also show a significant impact on Individual Taxpayer Compliance, with a t-statistic of $3.040 > 1.96$ and a p-value of $0.001 < 0.05$. Consequently, H3 is accepted.

4.2.4 Interpretation

Description	Explanation	Hypothesis Results
The partial effect of taxation knowledge on Compliance of Individual Taxpayers	Significantly influences	H1 Accepted
The partial effect of taxpayer awareness on Compliance of Individual Taxpayers	Significantly influences	H2 Accepted
The effect of partial tax sanctions on the compliance of individual taxpayers	Significantly influences	H3 Accepted

Table 4. Interpretation

4.2.4.1 The Influence of Tax Knowledge (X1) on Individual Taxpayer Compliance

The results indicate that the tax knowledge variable shows a *t-statistic value* of $6.355 > 1.96$ with a *p-value* of $0.000 < 0.05$, signifying a significant effect on individual taxpayer compliance. Therefore, H_0 is rejected and H_1 is accepted. This confirms that tax knowledge significantly influences individual taxpayer compliance (Y). These findings are consistent with previous studies by *Wibowo et al. (2022)*, *Karlinah et al. (2024)*, *Puspodewanti & Susanti (2021)*, *Nwanji (2022)*, *Timothy & Abbas (2021)*, and *Hardika et al. (2021)*. The decline in tax reporting rates reflects uneven tax knowledge among taxpayers. Data from *KPP Pratama Jakarta Kramat Jati* show that the compliance rate of individual micro-entrepreneurs decreased from 63% to 61%, despite an increase in the number of registered taxpayers. Under the self-assessment system, tax knowledge plays a vital role as taxpayers are responsible for fulfilling their own obligations (*Oktaviani et al., 2023*). According to *Tirto.id (2024)*, Yusuf stated that low compliance is primarily caused by insufficient education and tax understanding. Thus, tax knowledge is a crucial determinant of individual taxpayer compliance, especially among micro-entrepreneurs registered at *KPP Pratama Jakarta Kramat Jati*. Greater public understanding of taxation as a contribution to national development encourages voluntary compliance. Therefore, continuous education and outreach programs are essential to strengthen taxpayers' awareness that paying taxes represents active participation in national progress.

4.2.4.2 The Influence of Taxpayer Awareness (X2) on Individual Taxpayer Compliance

The results indicate that taxpayer awareness (X2) significantly affects individual taxpayer compliance, with a *t-statistic value* of $2.858 > 1.96$ and a *p-value* of $0.004 < 0.05$. Therefore, H_0 is rejected and H_2 is accepted, confirming that taxpayer awareness has a positive and significant effect on compliance (Y). This finding aligns with prior research by *Anggadini & Bramasto (2022)*, *Melilinda et al. (2024)*, *Andi & Widyastuti (2021)*, and *Nitasari et al. (2023)*, all of which demonstrate that higher taxpayer awareness contributes to improved compliance. According to *Tirto.id (2024)*, the percentage of taxpayers filing annual returns increased from 73.06% in 2019 to 88% in 2023. However, about 2.3 million taxpayers still failed to report, indicating that awareness remains suboptimal. A similar trend was observed at *KPP Pratama Jakarta Kramat Jati*, where the compliance rate among micro-entrepreneurs stagnated between 63% and 61%, despite a rise in registered taxpayers (*Oktaviani et al., 2023*). Under the self-assessment system, taxpayer awareness is critical since taxpayers are personally responsible for reporting their tax obligations. Lack of understanding or attention to these responsibilities directly affects compliance (*Tirto.id, 2024*). Therefore, enhancing awareness through continuous education and socialization programs is a key strategy to improve compliance levels. In conclusion, taxpayer awareness significantly influences individual taxpayer compliance (WPOP). Awareness arises from understanding the importance of taxation as both a legal and civic duty. The higher the awareness, the greater the likelihood of voluntary compliance. Questionnaire results also reveal that micro-entrepreneurs at *KPP Pratama Jakarta Kramat Jati* recognize taxation as a legal obligation that supports national development and public services. A positive attitude toward taxation thus becomes a key factor in strengthening taxpayer compliance.

4.2.4.3 The Influence of Tax Sanctions (X3) on Individual Taxpayer Compliance

The hypothesis testing results indicate that tax sanctions (X3) significantly influence individual taxpayer compliance, with a *t*-statistic value of $3.040 > 1.96$ and a *p*-value of $0.001 < 0.05$. Therefore, H_0 is rejected and H_3 is accepted, meaning that tax sanctions have a significant effect on individual taxpayer compliance (Y). This finding is consistent with previous studies by *Amah et al. (2021)*, *Harto (2021)*, and *Yuliatic & Fauzi (2020)*, which conclude that strict and consistent enforcement of tax sanctions encourages taxpayers to comply with their obligations. According to *Tirto.id (2024)*, the annual tax return (SPT) filing rate reached 88% in 2023, indicating improved compliance partly due to effective sanction enforcement. However, some taxpayers still failed to report, suggesting that while sanctions promote compliance, their impact remains limited without complementary measures. Data from *KPP Pratama Jakarta Kramat Jati* also show that the compliance rate among micro-entrepreneurs stagnated between 63% and 61%, despite an increase in registered taxpayers. This indicates that sanctions play an important but not yet optimal role in influencing compliance. Therefore, to enhance the effectiveness of sanctions, complementary measures such as taxpayer education, system simplification, and improved tax services are essential to foster long-term voluntary compliance. Overall, the results demonstrate that tax sanctions function effectively as a law enforcement instrument that strengthens awareness and compliance among individual taxpayers, particularly micro-entrepreneurs registered at *KPP Pratama Jakarta Kramat Jati*. Taxpayers' understanding of the consequences of non-compliance encourages responsible behavior, confirming that sanctions remain a critical element in supporting a fair and effective tax system. In summary, tax sanctions make a significant contribution to improving the compliance of individual taxpayers, especially micro-business owners at the Jakarta Kramat Jati Tax Office.

5. Discussion

The results of this study demonstrate that tax knowledge, taxpayer awareness, and tax sanctions each have a significant influence on individual taxpayer compliance among micro-business owners registered at the Jakarta Kramat Jati Tax Office. These findings align with the Theory of Planned Behavior (Ajzen, 1991), which emphasizes that behavior is driven by intention, shaped through knowledge, social awareness, and perceived control — in this case, represented by legal sanctions. First, the influence of tax knowledge confirms that a deeper understanding of taxation systems, regulations, and procedures enhances taxpayers' ability and willingness to fulfill their obligations. The strong *t*-statistic value ($6.355 > 1.96$) and *p*-value ($0.000 < 0.05$) show that adequate tax literacy contributes significantly to compliance. This result reinforces the findings of *Wibowo et al. (2022)* and *Puspodewanti & Susanti (2021)*, who also identified tax knowledge as a critical determinant of compliance. In the context of Indonesia's self-assessment system, sufficient tax knowledge enables taxpayers to calculate, pay, and report their taxes independently and accurately, thereby reducing administrative errors and potential violations. Second, taxpayer awareness also significantly affects compliance ($t = 2.858$; $p = 0.004$). Awareness reflects a sense of civic duty and moral responsibility to contribute to national development through tax payments. High awareness motivates voluntary compliance, while low awareness often results in negligence or avoidance. This finding supports previous studies by *Anggadini & Bramasto (2022)* and *Nitasari et al. (2023)*. In practice, awareness can

be strengthened through consistent tax education programs, socialization campaigns, and transparent governance that builds public trust in the taxation system. Third, the results show that tax sanctions significantly influence compliance ($t = 3.040$; $p = 0.001$). Sanctions serve as an external control mechanism that enforces discipline among taxpayers. The finding aligns with Amah et al. (2021) and Yuliatic & Fauzi (2020), who concluded that strict and consistent application of sanctions can deter non-compliance. However, sanctions alone are not sufficient; they must be supported by effective supervision, administrative simplification, and taxpayer assistance to ensure sustainable compliance. Overall, this study empirically confirms that tax knowledge, awareness, and sanctions interact synergistically in influencing taxpayer behavior. Knowledge shapes understanding, awareness drives intention, and sanctions enforce discipline — together forming a comprehensive framework that supports voluntary and responsible tax compliance in accordance with the Theory of Planned Behavior.

6. Conclusion, Implication, and Recommendation

This study concludes that **tax knowledge, taxpayer awareness, and tax sanctions** each have a **significant and positive influence** on individual taxpayer compliance, particularly among micro-business taxpayers registered at the Jakarta Kramat Jati Tax Office. The results indicate that the enhancement of tax compliance is not determined by a single factor but rather by the interaction among cognitive, attitudinal, and regulatory dimensions. Tax knowledge builds the foundation for understanding fiscal obligations, taxpayer awareness fosters the willingness to comply voluntarily, and tax sanctions ensure discipline through legal enforcement. Together, these three factors explain 68.9% of the variation in taxpayer compliance, indicating a strong model and highlighting their crucial role in promoting responsible tax behavior. The finding that tax knowledge significantly affects compliance demonstrates that a comprehensive understanding of tax regulations encourages taxpayers to fulfill their obligations correctly and timely. Limited tax literacy among micro-entrepreneurs remains a key obstacle to achieving optimal compliance. Hence, the Directorate General of Taxes (DGT) must prioritize continuous and accessible tax education programs, especially for micro and small business actors, to reduce errors and increase voluntary compliance. Similarly, taxpayer awareness also plays an essential role in shaping compliant behavior. Awareness represents not only cognitive understanding but also moral and social responsibility. The results show that higher levels of awareness correspond with stronger compliance intentions, in line with the principles of the Theory of Planned Behavior (Ajzen, 1991). Therefore, tax authorities should intensify campaigns emphasizing the civic importance of paying taxes and the direct benefits of compliance to public welfare and national development. In addition, tax sanctions are proven to significantly influence compliance by creating a deterrent effect for non-compliance. However, sanctions must be applied consistently and fairly to maintain public trust. Sanctions alone are insufficient to ensure sustainable compliance; they must be complemented by preventive measures such as tax education, simplified administrative systems, and improved service quality. The implications of these findings are both theoretical and practical. Theoretically, this study reinforces the applicability of the Theory of Planned Behavior in the field of taxation, where knowledge, awareness, and control (in the form of sanctions) collectively determine behavioral intention and actual compliance. Practically, the results highlight the importance of an integrated compliance strategy combining education,

awareness-building, and enforcement. For the Directorate General of Taxes, it is essential to strengthen collaboration with local governments, universities, and business associations in delivering tax literacy programs tailored to micro-entrepreneurs. Digitalization initiatives, such as online reporting platforms and virtual education modules, should also be expanded to increase accessibility and convenience for taxpayers. Furthermore, the government should adopt a balanced approach that not only emphasizes sanctions but also recognizes compliant taxpayers through incentives or public acknowledgment. Establishing reward mechanisms and transparent service standards will enhance trust in the tax administration and foster long-term voluntary compliance. In conclusion, improving individual taxpayer compliance requires synergy among knowledge, awareness, and enforcement. A well-informed and socially conscious taxpayer base, supported by fair and consistent implementation of tax regulations, will strengthen Indonesia's fiscal capacity and contribute to sustainable national development. Future research is recommended to expand the model by incorporating additional variables such as digital literacy, perceived fairness, or trust in government institutions, and to extend the study across multiple tax offices to ensure broader generalization and validity of results.

7. References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211.
- Alfarighi, D., Kharirotuz, N., Sr, L. A., Sari, I. P., & Bayu, R. (2023). *Efforts to improve taxpayer compliance in DIY Jogjakarta* (Efitra, Ed.). PT Sonpedia Publishing Indonesia.
- Amah, N., Rustiari, N. W., & Hatmawan, A. A. (2021). Tax compliance option during the pandemic: Moral, sanction, and tax relaxation (case study of Indonesian MSME taxpayers). *Review of Applied Socio-Economic Research*, 22(2), 21–36.
- Andi, E., & Widyastuti, T. (2021). *The influence of taxpayer awareness, tax knowledge and understanding on taxpayer compliance in Semarang City*. Anggadini, S. D., & Bramasto, A. (2022). Determination of individual taxpayer compliance in Indonesia: A case study. *Journal of Accounting Studies*, 9(1).
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publications.
- Dr. Amruddin. (2019). *Quantitative research methodology*. Sustainability (Switzerland), 11(1).
- Dr. Sandu Siyoto, S. K. M., & Ali Sodik, M. (2015). *Basic research methodology* (Ayup, Ed.). Media Publishing Literacy.
- Ghozali, I. (2018). *Partial Least Squares: Konsep, teknik dan aplikasi menggunakan program SmartPLS 3.0*. Universitas Diponegoro.
- Graha, G. A. S., Heliastuti, S. B., & Widokarti, J. R. (2024). The effect of taxpayer awareness and tax knowledge on individual taxpayer compliance at KPP Pratama Probolinggo. *Journal of Economic Research*, 8(1).
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24.

- Hardika, N. S., Arya, K., Wicaksana, B., & Subratha, I. N. (2021). The impact of tax knowledge, tax morality, and tax volunteers on tax compliance. *International Conference on Science and Technology on Social Science*, 544, 98–103.
- Harto, P. (2021). Determinants of personal tax compliance. *Subadriyah Journal*, 7, 1675–1680.
- Karnedi, N. F., & Hidayatulloh, A. (2019). The effect of tax awareness, tax sanctions, and tax amnesty on private taxpayer compliance. *Journal of Taxation Studies*, 12(August).
- Khodijah, S., Barli, H., & Irawati, W. (2021). The effect of understanding tax regulations, quality of fiscal services, tax rates, and tax sanctions on individual taxpayer compliance. *JABI (Indonesian Journal of Sustainable Accounting)*, 4(2), 183–195.
- Mawaddah, K., Kartika, A., & Ma'sum, M. A. (2023). The effect of taxpayer knowledge, taxpayer awareness, and tax sanctions on motor vehicle taxpayer compliance in Semarang. *Equity Journal*, 7(December), 1–13.
- Meilinda, R., Firasati, A., Swadaya, U., & Jati, G. (2024). The effect of taxpayer awareness, tax sanctions, fiscal service quality, and education level on individual taxpayer compliance at KPP Pratama Cirebon Dua. *Journal of Accounting and Taxation*, 3(7), 1578–1595
- .Nasiroh, D., & Afiqoh, N. W. (2022). The effect of tax knowledge, tax awareness, and tax sanctions on individual taxpayer compliance. *Journal of Economics and Business Research*, 152–164
- .Nitasari, A., Nurlaela, S., & Siddi, P. (2023). The effect of tax service quality, education level, tax knowledge, tax sanctions, and taxpayer awareness on taxpayer compliance. *Journal of Economics and Finance*, 7, 2494–2505.
- Nwanji, T. (2022). Impact of tax fairness and tax knowledge on tax compliance behavior of listed manufacturing companies in Nigeria. *African Journal of Accounting Studies*.
- Oktaviani, B., Triyani, Y., & Yos, J. (2023). The effect of taxpayer awareness, tax sanctions, quality of fiscal service, and application of the e-filing system on compliance of individual non-entrepreneur taxpayers registered at Kramat Jati Tax Service Office. *Journal of International Conference Proceedings*, 6(1), 125–138.
- Ompusunggu, H. (2022). Analysis of tax knowledge and tax sanctions on the compliance of MSME taxpayers in Batam City. *Journal of Economic and Business Studies*, 5(12), 1–13.
- Pujayati. (2025). The effect of tax knowledge, tax awareness, implementation of e-filing, tax sanctions, and tax services on the compliance of MSME taxpayers (Case study of MSMEs registered in Karawaci District). *Journal of Accounting*, 1, 1–9.
- Puspodewanti, C. P., & Susanti, S. (2021). The influence of tax knowledge, service quality, and taxpayer awareness on the compliance of Surabaya MSME taxpayers. *E-Journal of Economics and Business, Udayana University*, 10(11), 967. <https://doi.org/10.24843/eeb.2021.v10.i11.p04>
- Rahadi, D. R. (2023). *Introduction to the Partial Least Squares Structural Equation Model (PLS-SEM)*. CV Lentera Ilmu Madani.
- Sarumaha, R. L. G. F. H. (2022). The effect of taxpayer awareness, fiscal services, taxpayer counseling, tax audits, and tax sanctions on individual taxpayer compliance at the Medan Petisah Pratama Tax Service Office. *Journal of Accounting and Business Research*, 8(1), 134–140.

- Sata, M. B., Samrotun, Y. C., & Siddi, P. (2022). Compliance of MSME taxpayers in Surakarta during the Covid-19 pandemic. *Journal of Economics and Entrepreneurship*, 9(1).
- Savitri, F., & Nuraina, E. (2023). The effect of tax sanctions on individual taxpayer compliance at the Pratama Madiun Tax Service Office. *Journal of Tax Administration*, 45–55.
- Scott, L. Y., & Laurentya, V. (2024). Tax awareness as a mediation in the influence of tax knowledge and understanding on MSME taxpayer compliance. *Owner*, 8(3), 2235–2249.
- Sianturi, R. F. (2022). The influence of tax knowledge and tax sanctions on tax compliance in MSMEs in Medan City. *Journal of Business and Economics*, 6, 747–758.
- Suandi, E. (2008). *Tax planning* (M. Teresa, Ed.; 4th ed.). Salemba Empat.
- Sumanto, D. (2022). *Quantitative research methodology* (E. S. Mulyanta, Ed.). Supriatiningsih, & Jamil, F. S. (2021). The influence of e-filing policy, tax sanctions, and taxpayer awareness on individual taxpayer compliance. *Journal of Economics and Accounting Research*, 9(1).
- Suraji, R., Istianingsih, S., Sastrodhardjo, & Whedy. (2023). *Dissecting human abilities in achieving dreams of the path of spirituality, attitudes, competencies, and understanding of economic actors* (F. S. Anggeraini, Ed.). Publisher Peneleh.
- Surdayana, B., & Agusiady, H. R. (2022). *Quantitative research methodology*. Deepublish.
- Taing, H. B., & Chang, Y. (2021). Determinants of tax compliance intention: Focus on the theory of planned behavior. *International Journal of Public Administration*, 44(1), 62–73.
- Timothy, J., & Abbas, Y. (2021). Tax morale, perception of justice, trust in public authorities, tax knowledge, and tax compliance: A study of Indonesian SMEs. *Journal of Tax Research*, 19(1), 168–184.
- Tirto.id. (2024). *Behind the low compliance of MSME taxpayers*. <https://tirto.id>
- Wibowo, A. S., Nurlaela, S., & Chomsatu, Y. (2022). Factors that affect the compliance of individual taxpayers. *Owner*, 6(2), 1304–1317.
- Widyanti, Y., Erlansyah, D., Butar, S. D. R. B., & Maulidya, Y. N. (2021). The influence of the level of understanding, sanctions, taxpayer awareness, and tax socialization on MSME taxpayer compliance. *Business and Management Journal*, 20(3), 285–294.
- Yulia, Y., Wijaya, R. A., Sari, D. P., & Adawi, M. (2020). The influence of tax knowledge, taxpayer awareness, education level, and tax socialization on taxpayer compliance in MSMEs in Padang City. *Journal of Economics and Management*, 1(4), 305–310
- .Yuliatic, N. N., & Fauzi, A. K. (2020). Tax literacy, service quality, tax sanctions, and compliance of MSME taxpayers. *Business Accounting & Management (ABM)*, 27(2).