

Analysis of the Impact of Tax Amnesty, Tax Knowledge, Taxpayer Services, Tax Awareness, and Tax Sanctions on Taxpayer Compliance

Lina Yanti¹, Shine Pintor S. Patiro², Heffi Christya Rahayu³

Postgraduate, Universitas Terbuka, Indonesia

*Correspondence: inakusumah27@gmail.com



This is an open access article distributed under the Creative Commons Attribution License CC-BY-NC-4.0 ©2025 by author (<https://creativecommons.org/licenses/by-nc/4.0/>)

ABSTRACT

The purpose of this study is to examine the influence of the tax amnesty program, tax knowledge, tax services, tax awareness, and tax sanctions on taxpayer compliance at the Batam Utara Primary Tax Office (KPP Pratama Batam Utara). The type of research used in this study is causal-comparative research. This research employs a quantitative approach. The population in this study consists of 306,230 taxpayers, and the sample includes 300 taxpayers. The data used consists of primary and secondary data. Data analysis techniques in this study include descriptive analysis and multiple linear regression analysis. The researcher also used classical assumption tests such as normality test, linearity test, multicollinearity test, and heteroscedasticity test. Based on the research findings, it was found that tax amnesty and tax sanctions have a positive and significant impact on taxpayer compliance at the Batam Utara Primary Tax Office. The researcher also found that the variables of tax knowledge, tax services, and taxpayer awareness did not have a positive and significant impact on taxpayer compliance at the Batam Utara Primary Tax Office. Future research could add other independent variables that affect taxpayer compliance, such as education level, tax administration system, tax rates, tax audits, tax law enforcement, and other variables. Future research could also be conducted after the third round of the tax amnesty, which is planned to take place in 2025.

Keywords: Tax Amnesty; Tax Knowledge; Tax Awareness; Taxpayer Compliance; Tax Services

INTRODUCTION

Tax is one of the sources of state revenue used by the government for financing public administration and development. The importance of tax for financing government administration and development is not balanced by Indonesia's low tax ratio, which is only 11.6 percent (APBN, 2020). The lower tax revenue compared to GDP indicates that there is still untapped tax potential that the government can explore from society. Currently, the government continues to make efforts to increase tax revenue by extending and intensifying tax collection.

Tax revenue has become a primary focus of the government to increase tax revenue by increasing the number of active taxpayers (Hajawiyah et al., 2021; Nurlaily et al., 2022; Ohemeng & Owusu, 2015; Pratiwi & Somantri, 2021). The approach taken to achieve this is to improve

taxpayer compliance as well as the quality of services and supervision in tax collection. Taxpayer compliance refers to the adherence to tax provisions that must be implemented (Bateman et al., 2019; Bergolo & Cruces, 2021; David, 2011; Fletcher & Stanton, 2019; Frederickson et al., 2012; Hajawiyah et al., 2021; Le et al., 2023, 2023; Nurlaily et al., 2022; Ohemeng & Owusu, 2015; Pratiwi & Somantri, 2021).

According to Ntiamoah et al. (2023), the level of taxpayer compliance is influenced by various factors, such as the condition of a country's tax administration system, taxpayer knowledge, taxpayer services, tax audits, tax law enforcement, and tax rates. The role of tax services is crucial in relation to taxpayer compliance in fulfilling their obligations. Tax officers are required to provide friendly, fair, and firm service to taxpayers at all times and to foster taxpayer awareness to fulfill their tax obligations (Nurlaily et al., 2022; Olsen et al., 2019). Another determining factor in taxpayer compliance is tax knowledge and understanding. Nurlaily et al. (2022) states that knowledge and understanding of tax regulations is a process where taxpayers learn about taxation and implement it in fulfilling their tax obligations, as well as understanding the General Provisions and Tax Procedures (KUP), which include how to make tax payments, payment locations, deadlines for payments, fines, and filing tax returns (SPT).

Tax compliance in Indonesia has consistently increased year by year since the DJP introduced the tax amnesty program in 2016-2017. Indonesia's tax compliance, which was initially only 61 percent in 2016, saw a significant increase to 72.58 percent in 2017. This level of tax compliance continued to rise until 2021, when Indonesia's tax compliance rate reached 84.07 percent. The second tax amnesty program, which ran from January 1, 2022, to June 30, 2022, also impacted tax compliance, with reporting and tax payments reaching 83.2 percent.

In 2022, the tax compliance ratio decreased by 0.87 percent after the second tax amnesty program ended. This decline in tax compliance made the author feel the need to conduct a more in-depth study and empirically prove which factors influence tax compliance in Indonesia. The author chose five variables to study in depth: the influence of tax amnesty, tax knowledge, tax services, tax awareness, and tax sanctions on taxpayer compliance at the Batam Utara Primary Tax Office (KPP Pratama Batam Utara).

METHOD

The type of research used in this study is causal-comparative research (Indrianto; Supomo, 2002). This study aims to explain the relationship between independent variables—tax amnesty, tax knowledge, tax services, tax awareness, and tax sanctions—and the dependent variable, which is taxpayer compliance at the Batam Utara Primary Tax Office (KPP Pratama Batam Utara), in order to test the hypotheses that have been proposed. The object of this research is taxpayers at the Batam Utara Primary Tax Office. This research employs a quantitative approach, which is a research method used to study a specific population or sample aimed at testing the established hypothesis (Sugiyono, 2015).

This research uses both primary and secondary data. The primary data required for this research concerns variables such as tax amnesty, taxpayer knowledge, assessments of tax services, tax awareness, and tax sanctions. The secondary data needed includes the number and types of taxpayers registered at the Batam Utara Primary Tax Office. The primary data source in this study is a questionnaire filled out by taxpayers, providing alternative answers on the questionnaire using a Likert scale. The questionnaire contains questions designed to assess taxpayers' knowledge of taxation in Indonesia and their evaluation of the services provided by tax officers at the Batam Utara Primary Tax Office. Secondary data in this study is sourced from Indonesian tax data obtained from the internal system at the Directorate General of Taxes, such as the SIDJP (Directorate General of Taxes Information System), the Tax Amnesty portal, the

DJP Portal application, and others. This research will be conducted at the Batam Utara Primary Tax Office, located at Jalan Kuda Laut No.1, Sungai Jodoh, Batu Ampar, Sungai Jodoh, Batu Ampar District, Batam City, Riau Islands 29444. The study will be conducted in 2024, with data sourced from 2017 to 2024. The sampling technique in this study will use simple random sampling of 300 taxpayers.

Data collection will employ a quantitative method using statistical datasets and survey questionnaires. The researcher will also use a quantitative research method with an observation technique, a data collection method performed with precision and accuracy to obtain research data. Data analysis techniques in this study will include descriptive analysis and multiple linear regression analysis. The researcher will also use classical assumption tests such as normality tests, linearity tests, multicollinearity tests, and heteroscedasticity tests.

RESULT AND DISCUSSION

Result

Multiple Linear Regression Analysis

Multiple linear regression is a statistical model that involves more than one independent variable or predictor. In English, this term is known as

Table 1
Results of Multiple Linear Regression Test

Model	Unstandardize d Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	9.822	2.246		4.373	.000
X1	.109	.044	.130	2.456	.015
X2	.001	.054	.001	.014	.989
X3	.003	.130	.002	.023	.982
X4	.246	.134	.137	1.834	.068
X5	.410	.071	.420	5.821	.000

Source: Processed Primary Data, 2025

The multiple linear regression analysis resulted in the equation: $Y = a + b_1.X_1 + b_2.X_2 + b_3.X_3 + b_4.X_4 + b_5.X_5 = 9.822 + 0.109X_1 + 0.001X_2 + 0.003X_3 + 0.246X_4 + 0.410X_5 + e$. This equation can be interpreted as follows: the value of a , which is 9.822, represents the constant, or the value of Y when the variables X_1 , X_2 , X_3 , X_4 , and X_5 have no influence. The coefficient b_1 of 0.109 indicates that variable X_1 has a positive effect on Y , meaning that for every 1-unit increase in X_1 , Y will increase by 10.9% or 0.109. The coefficient b_2 of 0.001 shows that X_2 also has a positive effect on Y , meaning that for every 1-unit increase in X_2 , Y will increase by 0.1% or 0.001. Similarly, the coefficient b_3 of 0.003 suggests that X_3 has a positive effect on Y , with a 1-unit increase in X_3 resulting in a 0.3% or 0.003 increase in Y . The coefficient b_4 of 0.246 indicates that X_4 has a positive effect on Y , meaning that a 1-unit increase in X_4 will lead to a 24.6% or 0.246 increase in Y . Lastly, the coefficient b_5 of 0.410 implies that X_5 has the most significant positive effect on Y , with every 1-unit increase in X_5 causing a 41% or 0.410 increase in Y .

The first hypothesis in this study is that tax amnesty has a positive effect on taxpayer compliance at the Batam Utara Primary Tax Office. Based on the test conducted, the t-significance value for the tax amnesty variable is 0.015, which is less than 0.05, with a regression coefficient of +0.109. This indicates that tax amnesty has a significant positive effect on taxpayer compliance at the Batam Utara Primary Tax Office. Therefore, the first hypothesis is accepted. This result is supported by a study conducted by Ngadiman and Huslin (2015), which concluded that tax amnesty positively affects taxpayer compliance.

The second hypothesis of this study is that taxpayer tax knowledge has a positive effect on tax compliance at the Batam Utara Primary Tax Office. Based on Table 11, the t-significance value for the tax knowledge variable is 0.989, which is greater than 0.05, with a regression coefficient of +0.001. This indicates that tax knowledge does not have a significant positive effect on taxpayer compliance. Therefore, the second hypothesis is rejected.

The third hypothesis of this study is that tax services have a positive effect on tax compliance at the Batam Utara Primary Tax Office. Based on the table above, the t-significance value for the tax services variable is 0.982, which is greater than 0.05, with a regression coefficient of +0.003. This means that tax services do not have a significant effect on taxpayer compliance at the Batam Utara Primary Tax Office. Therefore, the third hypothesis is rejected.

The fourth hypothesis of this study is that taxpayer awareness has a positive effect on tax compliance at the Batam Utara Primary Tax Office. Based on the table above, the t-significance value for the tax knowledge variable is 0.068, which is greater than 0.05, with a regression coefficient of +0.246. This indicates that taxpayer awareness does not have a significant effect on taxpayer compliance at the Batam Utara Primary Tax Office. Therefore, the fourth hypothesis is rejected.

The fifth hypothesis of this study is that tax sanctions have an effect on tax compliance at the Batam Utara Primary Tax Office. Based on Table 11, the t-significance value for the tax sanctions variable is 0.000, which is less than 0.05, with a regression coefficient of +0.410. This means that tax sanctions have a significant positive effect on taxpayer compliance at the Batam Utara Primary Tax Office. Therefore, the fifth hypothesis is accepted.

Discussion

The findings of this study provide important insights into the factors influencing taxpayer compliance at the Batam Utara Primary Tax Office, particularly in relation to the tax amnesty program. The first hypothesis, which posits that tax amnesty has a positive effect on taxpayer compliance, was supported by the data. The t-significance value of 0.015, which is less than the 0.05 threshold, and the regression coefficient of +0.109, demonstrate that tax amnesty positively and significantly influences compliance. This result aligns with the findings of (Sari & Fidiana, 2017), who also concluded that tax amnesty leads to increased taxpayer compliance by reducing tax evasion and encouraging taxpayers to settle their outstanding liabilities. The theory of social exchange, which suggests that individuals are more likely to comply with systems that offer them benefits (such as forgiveness of penalties through tax amnesty), can help explain this positive relationship.

In contrast, the second hypothesis, which suggests that tax knowledge has a positive effect on taxpayer compliance, was rejected. The t-significance value of 0.989, which is greater than 0.05, indicates that tax knowledge does not significantly impact compliance at the Batam Utara Primary Tax Office. This finding is somewhat surprising, as one might expect that increased understanding of tax laws would lead to better compliance. However, this result may be explained by the fact that having knowledge of tax laws does not necessarily translate into compliance if there are other barriers such as weak enforcement or a lack of trust in the system. This aligns with

the research by Hajawiyah et al. (2021), which emphasized that while tax knowledge is essential, it is not the only determinant of compliance—psychological and institutional factors also play critical roles.

The third hypothesis regarding the effect of tax services on compliance was also rejected, as tax services did not show a significant effect. The result, with a t-significance value of 0.982, suggests that the quality of tax services alone may not be enough to increase compliance, indicating that other factors such as tax enforcement and perceived fairness are more influential. According to the Theory of Procedural Justice (Ha & Jang, 2009), taxpayer compliance is heavily influenced by perceptions of fairness in the process of taxation. If taxpayers do not perceive the tax system as fair or if the enforcement of tax laws is weak, the quality of services may not significantly affect compliance.

Similarly, the fourth hypothesis, which proposed that taxpayer awareness positively affects compliance, was also rejected. The t-significance value of 0.068 indicates that taxpayer awareness does not significantly influence compliance. This result underscores the complexity of taxpayer behavior and suggests that while awareness of tax obligations is important, it may not be sufficient in isolation to drive compliance. The Theory of Planned Behavior (Turan & Kara, 2018) suggests that attitudes, subjective norms, and perceived control also play essential roles in determining an individual's behavior. In the context of taxation, awareness alone may not lead to compliance without supportive attitudes and a belief that compliance is achievable.

The fifth hypothesis, which posits that tax sanctions have a significant effect on compliance, was supported by the data. With a t-significance value of 0.000, tax sanctions were found to have a significant positive impact on compliance. This result is consistent with deterrence theory, which asserts that the threat of sanctions (such as fines or penalties) effectively motivates individuals to comply with tax laws. According to this theory, the fear of punishment can outweigh other factors that might encourage tax evasion.

Limitations and Future Research

Despite the valuable insights provided, this study has several limitations. First, the research was limited to a single tax office in Batam Utara, which may not fully represent taxpayer compliance behavior across different regions in Indonesia. Future research could expand the sample size to include multiple regions, allowing for more generalizable findings. Additionally, the study relied on cross-sectional data, which limits the ability to assess causal relationships over time. Longitudinal studies could provide a deeper understanding of how tax amnesty and other factors affect compliance over time.

Furthermore, while this study examined several key factors such as tax knowledge, tax services, and sanctions, other factors like trust in government, social norms, and the influence of third parties (e.g., tax consultants) could also play significant roles in taxpayer compliance. Future studies should explore these additional variables to create a more comprehensive model of taxpayer behavior. Lastly, examining the effectiveness of different types of tax sanctions (e.g., fines, criminal penalties, or interest charges) in promoting compliance could offer further insights into how tax authorities can improve their enforcement strategies.

CONCLUSION

This study provides valuable insights into the factors influencing taxpayer compliance at the Batam Utara Primary Tax Office, with significant findings regarding the positive impact of tax amnesty on compliance, as supported by the theory of social exchange. However, contrary to expectations, tax knowledge, tax services, and taxpayer awareness were found not to significantly

affect compliance, suggesting that factors such as enforcement, fairness, and trust in the tax system play a more critical role. Additionally, tax sanctions were found to have a significant positive effect on compliance, aligning with deterrence theory. These findings highlight the importance of integrating various institutional and psychological factors in promoting compliance, while also indicating the need for further research to explore additional variables and the long-term effects of tax amnesty and enforcement strategies across broader regions.

REFERENCES

- Bateman, M., Duvendack, M., & Loubere, N. (2019). Is fin-tech the new panacea for poverty alleviation and local development? Contesting Suri and Jack's M-Pesa findings published in Science. *Review of African Political Economy*, 46(161), 480–495. <https://doi.org/10.1080/03056244.2019.1614552>
- Bergolo, M., & Cruces, G. (2021). The anatomy of behavioral responses to social assistance when informal employment is high. *Journal of Public Economics*, 193, 104313. <https://doi.org/10.1016/j.jpubeco.2020.104313>
- David, F. R. (2011). *Strategic Management: Concepts and Cases*.
- Fletcher, K. C., & Stanton, T. H. (2019). Public Sector Enterprise Risk Management. In *Public Sector Enterprise Risk Management*. Routledge. <https://doi.org/10.4324/9780429446115>
- Frederickson, G., Smith, K. B., Larimer, C. W., & Licari, M. J. (2012). *The Public Administration Theory Primer*. Westview Press.
- Ha, J., & Jang, S. C. (Shawn). (2009). Perceived justice in service recovery and behavioral intentions: The role of relationship quality. *International Journal of Hospitality Management*, 28(3), 319–327. <https://doi.org/10.1016/j.ijhm.2008.12.001>
- Hajawiyah, A., Suryarini, T., Kiswanto, & Tarmudji, T. (2021). Analysis of a tax amnesty's effectiveness in Indonesia. *Journal of International Accounting, Auditing and Taxation*, 44, 100415. <https://doi.org/https://doi.org/10.1016/j.intaccaudtax.2021.100415>
- Le, D. V., Le, H. T. T., Pham, T. T., & Vo, L. Van. (2023). Innovation and SMEs performance: evidence from Vietnam. *Applied Economic Analysis*, 31(92), 90–108. <https://doi.org/10.1108/AEA-04-2022-0121>
- Ntiemoah, J. A., Asare, J., Arhenful, P., & Owusu-Akomeah, M. (2023). *Taxing in a Pandemic: An Assessment of the Impact of Covid-19 Pandemic on Tax Revenues and Revenues of Small and Medium Enterprises in Ghana*. <https://doi.org/10.21203/rs.3.rs-2575805/v1>
- Nurlaily, Yafiz, M., & Nasution, Y. S. J. (2022). Implementation of 'Usyur in Tax Revenue During the Covid-19 Period in Medan City. *Jurnal Ilmiah Mizani*, 9(1), 9–18. <https://doi.org/10.29300/mzn.v9i1.2821>
- Ohemeng, F. L. K., & Owusu, F. Y. (2015). Implementing a revenue authority model of tax administration in Ghana: An organizational learning perspective. *The American Review of Public Administration*, 45(3), 343–364.
- Olsen, J., Kasper, M., Kogler, C., Muehlbacher, S., & Kirchler, E. (2019). Mental accounting of income tax and value added tax among self-employed business owners. *Journal of Economic Psychology*, 70, 125–139. <https://doi.org/https://doi.org/10.1016/j.joep.2018.12.007>
- Pratiwi, L., & Somantri, Y. F. (2021). Modernization of Tax Administration, Human Integrity and Taxpayer Compliance in East Preanger. *Journal of International Conference Proceedings*, 4(1), 243–253. <https://doi.org/10.32535/jicp.v4i1.1151>

- Sari, V. A. P., & Fidiana, F. (2017). Pengaruh Tax Amnesty, Pengetahuan Perpajakan, dan Pelayanan Fiskus Terhadap Kepatuhan Wajib Pajak. *Jurnal Ilmu Dan Riset Akuntansi (JIRA)*, 6(2).
- Turan, M., & Kara, A. (2018). Online social media usage behavior of entrepreneurs in an emerging market: Reasons, expected benefits and intentions. *Journal of Research in Marketing and Entrepreneurship*, 20(2), 273–291. <https://doi.org/10.1108/JRME-09-2016-0034>

