

Tax Understanding, Morality, and Compliance: The Moderating Role of Tax Awareness in Jakarta's Delivery Service Companies

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ABSTRACT

This study examines the impact of tax understanding and taxpayer morality on tax compliance, with tax awareness acting as a moderating variable in Jakarta's delivery service companies. Using a survey of 103 corporate taxpayers, data was analyzed using the Partial Least Squares (PLS) method. The results show that tax understanding significantly positively impacts tax compliance, whereas taxpayer morality has a weak and insignificant effect. Interestingly, tax awareness negatively moderates the relationship between tax understanding and compliance, suggesting that higher awareness may lead to critical views of the tax system, reducing compliance. Additionally, tax awareness directly impacts compliance, but the effect is weak. This research highlights the importance of enhancing tax education and understanding while reconsidering the approach to tax awareness campaigns, as greater awareness could lead to criticism of the tax system, which might undermine compliance. The study suggests that improving taxpayer education and awareness, with a focus on the fairness of the tax system, could enhance compliance rates and contribute to increased tax revenues for the government.

Keywords: tax understanding, taxpayer morality, tax awareness, tax compliance, delivery service company, Jakarta

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INTRODUCTION

One of the main aspects of a country's economy is tax. Tax is one of the main pillars of state revenue which is very important in supporting various development programs. Especially in developing countries such as in Asia, increasing tax revenue has great potential to make a significant contribution to achieving the desired economic and social development goals. The realization of tax revenue is often not optimal, and the level of taxpayer compliance remains an issue that requires deep attention (OECD, 2022).

Delivery service companies, especially in Jakarta, have grown significantly due to the increasing demand from e-commerce and the digital economy in recent years and peaked during the Covid-19 outbreak. People's shopping patterns has changed from traditional/conventional transactions to online shopping. However, with this growth, there has also been a striking inconsistency in tax compliance, so that it has become the focus of policy makers. This research aims to analyze the factors that influence the level of tax compliance in this sector using the variables of tax understanding, taxpayer morality, and tax awareness as moderating variables.

Tax compliance is critical to ensuring that governments can meet their revenue goals, which are essential for funding public services, infrastructure, and economic development. This is especially important in developing countries like Indonesia, where tax revenues constitute a major part of national income. Despite the critical role of tax, achieving consistent compliance among corporate taxpayers remains a challenge. In shipping companies in Indonesia, compliance varies widely, affecting overall tax collection and thus limiting the government's capacity to meet state revenues. The remaining structure of this article is as follows: section 2

reviews the relevant literature, section 3 outlines the analytical framework, methodology, and data sources. In Section 4, we discuss the findings, and section 5 presents the conclusion.

The Theory of Planned Behavior (TPB), proposed by Icek Ajzen, is a psychological model that links beliefs to behavior by explaining and predicting an individual's intention to perform certain behaviors (Ajzen & Fishbein, 1977). According to TPB, an individual's intention to engage in a behavior is influenced by three key factors: attitude (positive or negative feelings toward the behavior), subjective norms (social pressures or expectations), and perceived behavioral control (individual perception of their capability to perform the behavior). TPB suggests that intention is a strong predictor of actual behavior. In this study, TPB is used to understand the tax compliance behavior of shipping companies, examining how attitudes, subjective norms, and perceived control impact their fulfillment of tax obligations.

Compliance Theory, developed by Stanley Milgram (1963), defines compliance as the state of adherence to laws or regulations. Compliance refers to the inclination to follow orders or rules, showing discipline and commitment to established policies and regulations (Milgram, 1963). Tax compliance is rooted in an individual's awareness of their tax responsibilities, guided by the regulatory framework. This study views tax compliance as a behavior influenced by awareness and a desire to follow norms, which may be shaped by social imitation or behavioral modeling within and outside government sectors.

Tax compliance is defined as a taxpayer's adherence to prevailing tax regulations, including both formal and material compliance (Rahayu, 2020)². Nguyen et al. (2020) and Ngo et al. (2019) describe tax compliance as taxpayers' willingness to follow tax rules to promote economic balance, while Gunadi (2005) characterizes it as compliance achieved without enforcement or penalties. According to the OECD (2001), compliance is divided into administrative (procedural) and technical (regulatory) aspects, both of which are supported by public education, consultation, and audits (Mundiaga Daniel & Olusola Esther, 2019). Several empirical studies provide strong evidence supporting the relationship between tax understanding, taxpayer morality, tax awareness, and tax compliance.

Tax understanding refers to the understanding, ability to define, and interpret tax regulations and provisions that can encourage companies to fulfill their tax obligations correctly. According to (Rahayu, 2020), Tax understanding is categorized based on the ability to understand tax regulations, integrate regulatory components, and predict the broader implications of tax laws. This dimension includes knowledge of taxpayer rights, work income, and awareness of responsibilities, all of which significantly affect compliance (Twum et al., 2020).

In Indonesia, adequate tax knowledge is essential to improving compliance, especially under the self-assessment system, where taxpayers independently handle registration, reporting, and payment obligations. This understanding encourages proactive and honest compliance, thereby increasing tax revenue (Manuel & Jonnardi, 2023). This knowledge includes general tax procedures, annual reporting, payment deadlines, and fines, which are the basis for responsible taxpayer behavior. This knowledge includes general tax procedures, annual reporting, payment deadlines, and penalties, which are the basis for responsible taxpayer behavior (Yayuk et al., 2017); (Abu Hassan et al., 2022).

According to (Abina et al., 2021), taxpayer education, including electronic tax education, print media, and socialization to stakeholders, significantly increases tax compliance among SMEs. Similarly, (Twum et al., 2020) found that four dimensions of tax knowledge—tax rights, responsibilities, knowledge of work income, knowledge of business income, and awareness of sanctions—explained 37.1% of the variance in tax compliance. These studies emphasize that tax knowledge in particular is a statistically significant predictor of compliance. Further studies by (Abu Hassan et al., 2022), (Fadjarenie et al., 2023), and (Rahmawati, 2022) support this relationship, showing that tax education is strongly correlated with increased compliance.

Taxpayer morality involves ethical beliefs and values that can drive compliance due to a sense of responsibility towards the welfare of society. Morality is shaped by individual behavior, personal beliefs, and social factors that drive compliance with tax laws. High integrity and strong moral values in society drive voluntary tax compliance, while low moral standards can increase the motivation to commit tax evasion (Rahayu, 2020).

According to Kornhauser (2013), taxpayer morality includes personal altruism, external influences, and public trust in the government, which significantly affect compliance. For example, tax resistance in Kenya reflects distrust stemming from government corruption (Njilu, 2023). The OECD (2019) describes tax morality as an ethical measure of a taxpayer's propensity to comply or evade taxes (Huzaimi et al., 2021), while Luttmer and Singhal (2014) highlight intrinsic motivation, often rooted in religious or moral beliefs, as key to driving compliance. Schmolders (1960) in Nawi et al., further identified tax morality as the collective attitude of taxpayers towards fulfilling tax obligations, which is influenced by government influence and societal norms (Nawi et al., 2020).

High levels of taxpayer morality in a society correlate with increased compliance, thereby optimizing tax revenue. Research by (Njilu, 2023) found that taxpayer morality has a significant influence on tax compliance among young entrepreneurs in Kenya. Key factors including the deterrent effect of fines and dissatisfaction with unfavorable tax rates can influence the willingness to comply. Likewise, research conducted by (Huzaimi et al., 2021) and (Ofori, 2020) revealed a statistically significant positive relationship between tax morality and compliance levels, supported by findings from (Musimenta et al., 2019). These studies emphasize that strong taxpayer morality is an important determinant of compliance behavior.

Tax awareness is defined as the ability of taxpayers to carry out their tax obligations properly, which is driven by knowledge and understanding of the objectives and importance of taxes (Rahayu, 2020). Tax awareness involves knowledge of tax regulations, compliance in reporting and payment, and the application of tax principles in decision making. Indicators of tax awareness include timely tax payments, accurate reporting, and taxpayer diligence. Awareness is influenced by external factors, such as government policies, tax authorities, and social norms, as well as internal factors such as moral and religious beliefs (AY et al., 2021). Studies show that tax awareness reflects an understanding of the role of taxation in the welfare of society, encouraging compliance (Youde & Lim, 2019); (Rahmayanti et al., 2020). Alabede et al in 2011 in (Yayuk et al., 2017) described it as a voluntary drive to comply with tax regulations, recognize and respect tax obligations. Research by (AY et al., 2021) found a fairly positive correlation between tax awareness and tax compliance. Similar studies by (Hayat et al., 2022), (Mugarura et al., 2021), and (Mundiaga Daniel & Olusola Esther, 2019) also reported a significant positive effect of tax awareness on compliance. In contrast, (Andesto et al., 2023) observed a weaker effect of awareness on compliance.

Tax compliance is a crucial element in ensuring government revenues, especially in developing countries like Indonesia, where tax revenue contributes significantly to national income. Despite the growing importance of tax collection, compliance rates in Indonesia remain inconsistent, particularly in sectors like the delivery service industry in Jakarta. The rise of e-commerce and the digital economy has led to increased business activity, yet many companies still fail to comply with tax obligations. Addressing the factors that influence tax compliance, such as tax understanding, taxpayer morality, and tax awareness, is essential to improving compliance rates and ensuring a sustainable revenue stream for the government.

While previous studies have examined the relationship between tax understanding, taxpayer morality, and tax compliance, limited research has focused on the moderating role of tax awareness. This study addresses this gap by exploring how tax awareness interacts with tax understanding and taxpayer morality to influence compliance in Jakarta's delivery service companies. Moreover, while previous studies have emphasized the importance of tax

knowledge, the potential negative effects of heightened tax awareness on compliance behavior have not been adequately explored.

This study introduces a novel approach by incorporating tax awareness as a moderating variable in the relationship between tax understanding, taxpayer morality, and tax compliance. The research suggests that higher tax awareness may lead to a critical view of the tax system, which paradoxically reduces compliance. This finding contrasts with previous studies that assumed tax awareness would always lead to increased compliance, offering a fresh perspective on how awareness campaigns might backfire in certain contexts.

The purpose of this study is to analyze how tax understanding and taxpayer morality influence tax compliance, with a focus on the moderating role of tax awareness in delivery service companies in Jakarta. The benefits of this research include providing valuable insights for policymakers and tax authorities to refine tax awareness campaigns, improve taxpayer education, and address potential issues that could arise from heightened awareness. The study aims to enhance the effectiveness of tax compliance strategies, ultimately improving government revenues and fostering a more robust tax system in Indonesia.

METHOD

The type of research used in this study is quantitative. The population of this study is a shipping service company that is still actively operating, has a Postal Service Permit from the Ministry of Communication and Digital Affairs formerly Ministry of Communication Information and Technology domiciled in Jakarta. The sample selection process was carried out using a nonprobability sampling method using purposive sampling with special considerations to ensure representation in various subsectors in the industry. The data used are primary data obtained from respondents through questionnaires, or data from interviews with informants. From the number of questionnaire samples returned, there were 103 corporate taxpayers in the shipping service sector in Jakarta.

To determine the sample to be used in the study, there are various sampling techniques used. Sampling techniques can basically be grouped into two, namely Probability Sampling and Nonprobability Sampling. Probability sampling is a sampling technique that provides an equal opportunity for each element (member) of the population to be selected as a sample member, including simple random, proportional stratified random, disproportionate stratified random, and area random. Non-probability sampling is a sampling technique that does not provide an equal opportunity/chance for each element or member of the population to be selected as a sample. including systematic sampling, quota sampling, accidental sampling, purposive sampling, saturated sampling and snowball sampling (Oktris et al., 2022). In determining the sample, the researcher used nonprobability sampling with the purposive sampling method due to certain considerations. The criteria for respondents who were used as samples in this study were taxpayers of goods delivery service companies that were still active and had postal permits until 2023 and were still registered with the Ministry of Communication and Digital Affairs and were domiciled in Jakarta as many as 337 companies.

RESULTS AND DISCUSSION

The Effect of Tax Understanding on Tax Compliance

The results of the first hypothesis test indicate a significant influence of tax understanding on tax compliance, with tax understanding explaining 93.4% of the variance in tax compliance. This high explanatory power suggests a very strong, dependable relationship, meaning that improvements in taxpayers' understanding of tax concepts are strongly associated with higher compliance rates. The study concludes that better tax education directly enhances tax compliance, a finding consistent with previous research (Fadjarenie et al., 2023); (Rahmawati, 2022); (Abina et al., 2021); (Twum et al., 2020); (Abu Hassan et al.,

2022), all of which affirm a positive impact of tax understanding on compliance. A well-developed tax understanding is partly attributed to successful government efforts in disseminating tax regulations, which help taxpayers comprehend and apply them correctly. Taxpayers have expressed the need for the government, specifically the Directorate General of Taxes, to intensify technical guidance or outreach efforts, especially when new tax regulations are introduced, to further strengthen taxpayer knowledge.

In relation to the Theory of Planned Behavior (TPB), the findings suggest that tax understanding plays a crucial role in shaping attitudes, subjective norms, and perceived behavioral control, all of which promote compliant tax behavior. A positive attitude toward tax compliance arises from understanding the importance of taxes, tax rules, and the benefits of compliance. Subjective norms are influenced by the compliance behavior of peers, encouraging individuals to adopt similar behavior. Perceived behavioral control reflects taxpayers' confidence in their ability to meet tax obligations, which increases with greater tax knowledge, thus fostering higher compliance.

From a tax compliance theory perspective, the significant impact of tax understanding on compliance underscores the importance of tax education and accessible tax information in promoting both voluntary and enforced compliance. Good tax understanding fosters voluntary compliance by increasing taxpayers' comfort and confidence in their actions. It also helps to reduce fears of making mistakes, which further supports a voluntary compliance mindset.

The Effect of Taxpayer Morality on Tax Compliance

The second hypothesis test indicates that the influence of taxpayer morality on tax compliance is relatively small, accounting for only 14.4% of the variance in compliance. Although the relationship is positive, it is weak and statistically insignificant, with a low t-statistic that falls below the critical threshold, leading to the rejection of this hypothesis. The correlation between taxpayer morality and tax compliance is almost negligible, suggesting that taxpayer morality is not a primary factor influencing compliance in this context. This finding contrasts with previous studies (Huzaimi et al., 2021); (Njilu, 2023); (Luthfiana et al., 2023); (Ofori, 2020); (Musimenta et al., 2019), which have shown a significant impact of moral values on compliance.

In the context of the TPB, while morality may influence attitudes and subjective norms, other factors—such as tax knowledge, policies, or fear of sanctions—appear to have a stronger effect on perceived behavioral control and actual compliance behavior. The results suggest that taxpayer morality has a minimal and non-significant impact on tax compliance, likely because other factors, like tax understanding or economic considerations, play a more prominent role in shaping compliance-related attitudes. Individual moral norms may have a weaker effect due to the dominance of external factors such as social pressures, cultural norms, or authoritative influences.

In terms of compliance theory, morality is often linked to voluntary compliance, where individuals pay taxes out of a moral conviction to contribute to the state. However, in this study, morality's impact on compliance is not significant, indicating that individual moral values may not be a primary driver of tax compliance behavior. Instead, measurable factors like monitoring or sanctions may exert a stronger influence. In certain contexts, enforced compliance may be more relevant, as taxpayers follow tax regulations not due to moral values but rather out of fear of legal consequences or sanctions. These findings are further supported by responses from taxpayers, who, in open-ended questions, highlighted that tax understanding, regulations, or incentives likely play a more critical role than personal morality in enhancing compliance.

The Effect of Tax Understanding on Tax Compliance Moderated by Tax Awareness

Hypothesis testing shows that the tax awareness variable moderates the relationship between tax understanding and tax compliance, with a path coefficient of -0.125, indicating a

negative impact of 12.5%. This means that for every one unit increase in tax awareness, the effect of tax understanding on tax compliance decreases by 12.5%. Although the t-statistic is above the critical value, the hypothesis is statistically accepted but shows a very weak relationship, almost negligible. These results indicate that although tax awareness is expected to strengthen the relationship between tax understanding and compliance, the findings show the opposite. Higher tax awareness can cause taxpayers to be more critical of tax policies, thereby reducing the positive effect of tax understanding on compliance. The results of this test, although statistically the third hypothesis is accepted, because this hypothesis has no previous literature, the results of this study are a new hypothesis (novelty) that tax awareness moderates the relationship between tax understanding and tax compliance in a negative direction.

In the context of the TPB, tax awareness can affect taxpayers' attitudes towards the tax system. Taxpayers who are more aware may have a more critical attitude towards tax policies, which can result in a weakening of the positive impact of tax understanding on compliance, especially when the policy is considered unfair or non-transparent. Higher tax awareness can also increase perceived behavioral control, where taxpayers believe they can comply with their tax obligations. However, if this awareness includes an understanding of systemic weaknesses or unfairness, their willingness to comply may decrease. This explains why higher tax awareness can reduce the positive effect of tax awareness on compliance.

In compliance theory, the relationship between tax awareness and compliance can be understood through voluntary and forced compliance. High tax awareness often encourages voluntary compliance, but if taxpayers also critically assess the weaknesses of the tax system, they may be less likely to comply voluntarily. This may explain why tax awareness negatively moderates the relationship between tax awareness and compliance. Respondents' views indicate that factors such as perceptions of fairness and transparency in the tax system are more important to taxpayers with higher awareness. Therefore, this study suggests that higher tax awareness can lead to a more critical view of the tax system, thereby reducing the positive impact of tax awareness on compliance.

The Effect of Taxpayer Morality on Tax Compliance Moderated by Tax Awareness

The fourth hypothesis test shows that the tax awareness variable moderates the relationship between taxpayer morale and tax compliance, but the moderation effect is only 9.2%. This means that although tax awareness increases, the influence of taxpayer morale on tax compliance only increases slightly, but this effect is weak and almost insignificant. Although the coefficient is positive, the t-statistic is not large enough to exceed the critical value, so the effect is not statistically significant. As a result, the fourth hypothesis is rejected. Although tax awareness plays a role in moderating the relationship between taxpayer morale and compliance, the effect is not strong enough to be significant at a strict significance level. This result shows that tax awareness fails to moderate the relationship between taxpayer morale and tax compliance.

In the context of TPB, taxpayer morale can be linked to attitudes towards behavior, where taxpayers feel they have a moral responsibility to fulfill their tax obligations. However, the weak moderating effect of tax awareness on taxpayer morality in increasing tax compliance indicates that the perception of behavioral control is not strong enough to significantly increase the influence of morality on behavior. Other factors, such as the complexity of the tax system, law enforcement, and social norms, may play a more dominant role in influencing tax compliance, so that morality alone is not enough to significantly increase compliance.

According to Compliance Theory, tax compliance is influenced not only by individual morality or awareness but also by the risks and consequences of non-compliance, such as fines and penalties. Even with high tax awareness and strong moral values, compliance is

often more influenced by the fear of sanctions if the legal system is strong and penalties are enforced. In the context of this study, although tax awareness moderates the relationship between taxpayer morale and compliance, its effect is not statistically significant. The open-ended answers of respondents indicate that deterrent factors, such as legal sanctions or external factors such as trust in the government, ease of the tax system, and transparency, play a more important role in encouraging tax compliance than relying solely on taxpayer awareness or morality.

The Effect of Tax Awareness on Tax Compliance

The fifth hypothesis testing shows that the tax awareness variable negatively affects tax compliance, indicating a 11.1% negative influence. This means that tax awareness affects tax compliance negatively, contrary to the expected positive relationship. Although the t-statistic is higher than 1.96 makes the hypothesis statistically significant, the effect is weak and almost negligible. This finding contradicts the initial hypothesis, which expected a positive relationship between tax awareness and compliance. One possible explanation for the negative effect is that individuals with higher tax awareness may become more critical of the tax system or better understand loopholes in the tax regulations, which affects their compliance behavior. Other factors, such as trust in the government or perceptions of the benefits derived from taxes, might also play a role in compliance. This result aligns with studies by (Youde & Lim, 2019), (Taofeeq, 2018), (Rahmayanti et al., 2020), and (Mundiaga et al., 2019), which found that tax awareness can influence tax compliance, but the effect may be either positive or negative.

In TPB, increased tax awareness may lead individuals to develop a more critical attitude towards the tax system. They may view the system as unfair or inefficient, influencing their decision to not comply. Social influences or norms might also impact individuals with high tax awareness in deciding whether to comply. If social norms reflect non-compliant behavior, this can further influence individual decisions. Higher tax awareness might also lead individuals to feel more empowered to find weaknesses in the system, making them more likely to exploit these loopholes and avoid compliance.

And according to the Theory of Compliance, higher tax awareness is expected to encourage voluntary compliance. However, the negative effect found in this study suggests that greater awareness might lead taxpayers to identify loopholes in tax regulations or policies, prompting them to engage in tax avoidance or even tax evasion. Additionally, if taxpayers feel that the tax authority or system is not transparent or fair, they may choose non-compliance, even if they are aware of the importance of taxes.

This finding implies that tax awareness does not always have a positive impact on tax compliance. Factors such as trust in the government, perceptions of tax benefit distribution, and the fairness of the tax system are crucial in explaining why the relationship is negative. Increased tax awareness may make taxpayers more critical of the system, leading them to choose non-compliance if they perceive the system as unjust or unbeneficial. This aligns with several respondents' comments, which suggest that factors like government trust and tax system fairness play a significant role in shaping compliance behavior.

Discussion of Moderation Variable Analysis

To determine the type of moderation of the Tax Awareness variable in this study, we try to define each type of category according to the moderation theory according to (Baron & Kenny, 1986): (1) Pure Moderator: in this study, the moderation variable only moderates the relationship between the independent and dependent variables and does not have a direct relationship with the dependent variable. Example: Tax awareness only affects the relationship between tax understanding and tax compliance, but does not have a direct effect on tax compliance. (2) Homologizer Moderator: the moderation variable does not have a direct relationship with the dependent variable, but can affect the relationship between other

variables in the model. Tax awareness as a homologizer moderator will function as a variable that smooths or reduces bias in the relationship between variables. (3) Quasi Moderator: in this form of moderation, the moderation variable moderates the relationship between the independent and dependent variables while also having a direct relationship with the dependent variable. In this context, if tax awareness directly affects tax compliance (as shown in Hypothesis 5) and moderates the relationship between other variables, then tax awareness is a quasi moderator. (4) Independent Moderator: this variable has no effect on the relationship between the independent and dependent variables, but has a direct effect on the dependent variable. If the results of the study show that tax awareness does not moderate the relationship between other variables but has a direct effect on tax compliance, then it is an independent moderator.

Based on the research data, the moderator analysis produced the following analysis: (a) Hypothesis 3 shows that tax awareness moderates tax understanding and has a positive effect on tax compliance. Tax awareness moderates the relationship between tax understanding and tax compliance with a negative effect. However, hypothesis 5 shows that tax awareness has a direct negative effect on tax compliance. Based on these findings, tax awareness is a quasi moderator because it moderates between variables and has a direct relationship with tax compliance. (b) Hypothesis 4 shows that tax awareness moderates the relationship between taxpayer morale and tax compliance, but the effect is not significant. Since tax awareness also has a direct influence according to hypothesis 5, it is still categorized as a quasi moderator even though its moderation effect is not significant.

So, based on the analysis above, it can be concluded that tax awareness moderates the relationship between tax understanding and taxpayer morale towards tax compliance, and tax awareness as a moderating variable has a direct influence on tax compliance. So, the type of moderation of the tax awareness variable as a moderating variable in this study is a Quasi Moderator.

CONCLUSION

This study examines the influence of tax understanding and taxpayer morality on tax compliance in shipping service companies with postal business licenses from the Ministry of Communication and Information in Jakarta, introducing tax awareness as a moderating variable. The findings reveal that tax understanding positively affects compliance, as a deeper comprehension of tax regulations enhances compliance rates. In contrast, taxpayer morality shows a weak and insignificant influence on compliance, with tax understanding and awareness being more dominant factors. Interestingly, tax awareness negatively impacts compliance; higher awareness can lead to critical views of the tax system, thereby reducing compliance. Additionally, tax awareness weakens the positive relationship between tax understanding and compliance, suggesting that taxpayers with heightened awareness may challenge tax policies, leading to lower compliance. Tax awareness is classified as a quasi-moderator, affecting both the relationship between tax understanding and compliance and having a direct influence on compliance levels. To improve tax compliance in Indonesia, the study recommends implementing intensive education and socialization programs to enhance taxpayer understanding, promoting ethical values and social responsibility, conducting effective tax awareness campaigns, adopting flexible tax policies for varying income levels, and increasing the use of technology for easier reporting and payment. Finally, the study suggests that further research on tax awareness as a moderating variable could contribute to a more comprehensive understanding of its effects on compliance.

REFERENCES

- Abdillah, W., & HM, J. (2015). *Partial Least Square (PLS) Alternatif Structural Equation Modeling (SEM) dalam Penelitian Bisnis*. Penerbit Andi.
- Abina, S., Amaning, N., Osei Anim, R., Kyere, A., & Kwakye, G. (2021). Tax Compliance among Ghanaian SMEs: How impactful is Taxpayer Education? *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 10(4). <https://doi.org/10.6007/IJARAFMS/v10-i4/8332>
- Abu Hassan, N. S., Palil, M. R., Ramli, R., & Maelah, R. (2022). Enhancing Tax Compliance in Malaysia: Does Tax Learning and Education Matter. *International Business Education Journal*, 15(1), 18–29. <https://doi.org/10.37134/ibej.vol15.1.2.2022>
- Aguinis, H. (2004). *Regression analysis for categorical moderators*. Guilford Press.
- Ajzen, I., & Fishbein, M. (1977). Attitude-behavior relations: A theoretical analysis and review of empirical research. *Psychological Bulletin*, 84(5), 888–918. <https://doi.org/10.1037/0033-2909.84.5.888>
- Andesto, R., Oktris, L., & Sulastri. (2023). The Determinant of Tax Compliance in Indonesia (Experience in E-Commerce Environment). *Journal of Research in Social Sciences, Economics, and Management (JRSSEM)*, 03(01), 49–67. <https://doi.org/10.59141/jrssem.v3i01.523>
- Andrew F. Hayes. (2017). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford publications.
- AY, M., Humta, H., & Ghafourzay, H. (2021). Examining the Effect of Tax Understanding and Tax Awareness on Taxpayer Compliance in Kabul-Afghanistan. 3. *Sektor Sosial Ekonomi Dergisi*, 56 (1), 148–162. <https://doi.org/10.15659/3.sektor-sosyal-ekonomi.21.02.1445>
- Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–1182. <https://doi.org/10.1037/0022-3514.51.6.1173>
- Cohen. (2013). *Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences*. Routledge. <https://doi.org/10.4324/9780203774441>
- Fadjarenie, A., Tarmidi, D., & Wogo, P. P. (2023). Tax Socialization For Corporate Taxpayer, Is It Important? *Jurnal Akuntansi*, 27(2), 218–241. <https://doi.org/10.24912/ja.v27i2.1364>
- Ghozali, I. (2018). *Aplikasi analisis multivariete dengan program IBM SPSS 23*. Universitas Diponegoro.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2022). Partial Least Squares Structural Equation Modeling. In *Handbook of Market Research* (pp. 587–632). Springer International Publishing. https://doi.org/10.1007/978-3-319-57413-4_15
- Hayat, N., Salameh, A. A., Mamun, A. Al, Helmi Ali, M., & Makhbul, Z. K. M. (2022). Tax Compliance Behavior Among Malaysian Taxpayers: A Dual-stage PLS-SEM and ANN Analysis. *SAGE Open*, 12(3), 215824402211271. <https://doi.org/10.1177/21582440221127190>
- Huzaimi, Y., Jusoh, M., Mansor, F. A., Azmawaty, S. N., Razak, A., Basirah, W. N., & Noor, W. M. (2021). The Effects of Tax Knowledge, Tax Complexity and Tax Morality Towards Tax Compliance Behaviour Among Salaried Group in Malaysia. *Advances in Business Research International Journal*, 7(2), 250–266. <https://ir.uitm.edu.my/id/eprint/56427>

- Kwong, K., & Wong, K. (2019). *Mastering Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS in 38 Hours*. <https://www.researchgate.net/publication/332031150>
- L Oktris, D Tarmidi, L Nugroho, L Anasta, & A Fadjareni. (2022). *Tips dan Trik cara Praktis Menyusun Skripsi dan Tesis (Pertama)*. Pustaka Pranala.
- Luthfiana, D. N., Andika, A., Najmudin, M., & Nugroho, J. P. (2023). Socialization of Taxation as A Moderating Variable in The Application of The Theory of Planned Behavior to Taxpayer Compliance. *Dinasti International Journal of Economics, Finance & Accounting*, 4(3), 434–453. <https://doi.org/https://doi.org/10.38035/dijefa.v4i3.1872>
- Manuel, D., & Jonnardi, J. (2023). The Effect of Taxpayer Awareness, Tax Sanctions and Tax Knowledge On Individual Taxpayer Compliance In Tangerang City With Tax Socialization As A Moderation Variable. *Return: Study of Management, Economic and Bussines*, 2(6), 625–634. <https://doi.org/10.57096/return.v2i06.117>
- Milgram, S. (1963). Behavioral Study of obedience. *The Journal of Abnormal and Social Psychology*, 67(4), 371–378.
- Mudiaga Daniel, A., & Olusola Esther, I. (2019). Electronic Taxation and Tax Compliance Among Some Selected Fast Food Restaurants In Lagos State, Nigeria (Tax Payers Perspective). In *European Journal of Accounting, Auditing and Finance Research* (Vol. 7, Issue 7). www.eajournals.org
- Mugarura, A., Kaberuka, W., Tweheyo, G., & Muramuzi, B. (2021). Tax Understanding, Tax Awareness, and Tax Compliance in Nakawa Division, Kampala District, Uganda: The Moderating Role of Public Trust. *International Journal of Social Science and Economic Research*, 6(11), 4301–4322. <https://doi.org/doi.org/10.46609/IJSSER.2021.v06i11.005>
- Musimenta, D., Naigaga, S., Bananuka, J., & Najjuma, M. S. (2019). Tax compliance of financial services firms: a developing economy perspective. *Journal of Money Laundering Control*, 22(1), 14–31. <https://doi.org/10.1108/JMLC-01-2018-0007>
- Nawi, H. M., Yahaya, M. N., Cha, N. A., Kumar, R., & Zulkefle, W. N. S. A. (2020). Goods and Services Tax Revisited: Tax Compliance among the Malaysian Public, 2015–2018. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 10(1). <https://doi.org/10.6007/IJARAFMS/v10-i1/7179>
- Njilu, M. K. (2023). Tax Compliance among Small and Medium Manufacturing Enterprises in Kenya: Does Tax Morality Matter? *Rowter Journal*. <https://doi.org/10.33258/rowter.v2i1.836>
- OECD. (2022). *Strengthening Tax Revenues in Developing Asia*. <https://doi.org/https://doi.org/10.1787/db29f89a-en>
- Ofori, E. (2020). Contribution of Tax Morality and Compliance Costs to Tax Compliance of Micro and Small Scale Enterprises in Ghana. In *International Journal of Arts and Commerce* (Vol. 9, Issue 8). www.ijac.org.uk
- Rahayu, S. K. (2020). *Perpajakan: Konsep, Sistem dan Implementasi* (Revisi). Rekayasa Sains.
- Rahmawati, S. (2022). The Effect Of Tax Socialization, Tax Knowledge And Tax Morality On Tax Compliance. *International Journal of Educational Research and Social Sciences (IJERSC)*, 3(4), 1623–1629. <https://ijersc.org>
- Rahmayanti, N. P., Sutrisno T., S., & Prihatiningtias, Y. W. (2020). Effect of tax penalties, tax audit, and taxpayers awareness on corporate taxpayers' compliance moderated by compliance intentions. *International Journal of Research in*

- Business and Social Science* (2147- 4478), 9(2), 118–124.
<https://doi.org/10.20525/ijrbs.v9i2.633>
- Sanusi, S., Herda, N., Abdullah, N., & Rozzani, N. (2021). Tax Awareness Among Students from Higher Learning Institutions in Malaysia: Education Area as A Moderator. In *International Journal of Economics and Management Journal homepage* (Vol. 15, Issue 1). <http://www.ijem.upm.edu.my>
- Sawitri, D., Perdana, S., Muawanah, U., & Setia, K. A. (2017). The Influence of Tax Knowledge and Quality of Service Tax Authorities to the Individual Taxpayer Compliance through Taxpayer Awareness. *International Journal of Economic Research*, 14. <http://www.serialsjournal.com>
- Sharma, S., Richard, ;, Durand, M., & Gur-Arie, O. (1981). Identification and analysis of moderator variables. In *Journal of Marketing Research* (Vol. 18).
- Tambun, S., & Haryati, A. (2022). The Influence of Nationalism's Attitude and Tax Morals on Taxpayer Compliance through Tax Awareness. *Journal of Accounting, Business and Finance Research*, 14(1), 1. <https://doi.org/10.20448/2002.141.1.7>
- Taofeeq, A. (2018). Determinants of Tax Compliance among Small and Medium Enterprises in Kwara State, Nigeria (Doctoral dissertation, Kwara State University (Nigeria). *Kwara State University (Nigeria) ProQuest Dissertations Publishing*.
- Twum, K. K., Amaniampong, M. K., Assabil, E. N., Adombire, M. A., Edisi, D., & Akuetteh, Dr. C. (2020). Tax Knowledge and Tax Compliance Of Small and Medium Enterprises in Ghana. *South East Asia Journal of Contemporary Business, Economics and Law*, 21, 222–231.
- Yayuk, N. R., Margono, S., Eka, A. T., & Sudjatno. (2017). The role of taxpayer awareness, tax regulation and understanding in taxpayer compliance. *Journal of Accounting and Taxation*, 9(10), 139–146.
<https://doi.org/10.5897/JAT2017.0267>
- Youde, S., & Lim, S. (2019). The Determinants of Medium Taxpayers' Compliance Perspectives: Empirical Evidence from Siem Reap Province, Cambodia. *International Journal of Public Administration*, 42(14), 1222–1233.
<https://doi.org/10.1080/01900692.2019.1591447>