The Impact of Digital Taxation Implementation and Taxpayer Knowledge on Tax Revenue Obstacles, Moderated by Incentive Policy

Ani Susilowati^{1*}; Ratna Mappanyukki²

^{1,2}Management Department, Faculty of Economics and Business, Mercu Buana University Jakarta, Indonesia 11650 ¹anisusilowati90@gmail.com; ²ratna_mappanyuki@mercubuana.ac.id

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Abstract -The COVID-19 pandemic's worsening economic conditions increased obstacles in tax revenue. The obstacles that arise during the tax collection process take the form of tax evasion and tax avoidance by citizens. The research aimed to empirically prove the impact of digital taxation, taxpayer knowledge, and tax incentive policies during the COVID-19 pandemic, with tax obstacles as the dependent variable. The comprehensive discussion of the relationship between all variables in the research is a novelty of previous studies, which were carried out partially. The research population comprised corporate taxpayers in Jakarta, with a sample of 50 corporate taxpayers selected as the respondents using convenience sampling techniques. The data analysis technique used was quantitative, utilizing PLS-SEM (Partial Least Squares-Structural Equation Model). The research results indicate that implementing digital taxation and taxpayer knowledge significantly and negatively affect tax revenue obstacles. Moreover, tax incentive policies during the COVID-19 pandemic were a quasi-moderator variable that strengthens tax obstacles' adverse and significant effects. The research implications highlighted the crucial role of digital taxation and taxpayer knowledge in mitigating obstacles to tax revenue. The findings suggest that effectively implementing digital taxation measures and enhancing taxpayer knowledge can significantly reduce tax evasion and avoidance hindrances.

Keywords: digital taxation, taxpayer knowledge, tax incentive policies, tax obstacles

I. INTRODUCTION

Taxation is a principal revenue stream for numerous nations (Adefolaka & Omodero, 2022). Tax revenue is vital in bolstering the essential collection of income to support social systems and economic growth in the long run (Burchi, Schiller, & Strupat, 2020; Okunogbe & Santoro, 2023). Although tax regulations require taxpayers to make payments, the tax-collecting procedure frequently encounters obstacles such as non-compliance by taxpayers and technical issues (Kurniawan, Meliala, & Febrianto, 2022). From a psychological standpoint, society commonly sees taxes as a burden, necessitating a sense of assurance to guarantee equitable treatment (Sydrastiny & Parsa, 2021). Additional reasons, such as the absence of immediate advantages and discontent with tax services and systems, can impede taxpayers' will from adhering. The research emphasizes the importance of empirically comprehending the factors contributing to tax obstacles in the expectation that a more excellent knowledge of taxation can promote improved tax compliance.

Indonesia depends on taxes as a significant source of revenue, which is collected from national and regional taxes (Labibah, Warisle, & Faizin, 2019). Tax revenue in Indonesia experienced fluctuations between the years 2018 to 2022. In 2019, there was a rise in tax income, followed by a decline in 2020 due to the start of the COVID-19 pandemic. The current pandemic has not only resulted in a decrease in tax revenues but also negatively affected overall economic growth (Bischi, Grassetti, & Carrera, 2022). Obstacles to tax collection include both passive and active resistance from taxpayers (Arifiyanto et al., 2020; Labibah et al., 2019), along with structural hindrances, including uncertainty over the future and dissatisfaction with tax services (Kinyondo & Byaro, 2019).

There are many previous studies on tax compliance, but there is still limited research about tax revenue obstacles, particularly from the perspective of corporations as taxpayers. To overcome the tax revenue obstacles, it is necessary to take measures such as reforming taxation (Parica, 2022), enhancing the public's knowledge (Anto et al., 2021; Hardiningsih et al., 2019), and using digital technologies in the tax system (Gangodawilage, Madduraperuma, & Aluthge, 2021). Furthermore, the government can offer incentives to address the implications of the COVID-19 pandemic (Naitili, Hambali, & Nurofik, 2022). The research fills the gap in previous studies by examining the impact of government implementation of digital taxation and taxpayer knowledge on tax revenue obstacles.

Despite the adverse effects of the COVID-19 pandemic on tax collections, adopting digital technology is crucial for maintaining organizational continuity throughout this pandemic era. This is in response to the shifting behavior of individuals increasingly relying on digital platforms. Bassongui and Houngbédji (2023) demonstrates that digitizing taxes might lead to a substantial rise in revenue from taxes.

Adopting digital services in Indonesia is deemed effective in facilitating the fulfillment of tax duties. Individuals can fulfill their tax duties autonomously by utilizing the website, application, or page the Directorate-General of Taxes (DGT) offers. Integrating tax databases with financial institutions facilitates payment and verification, improving the ease of paying taxes, particularly value-added tax (VAT) and underpaid Tax Income (PPh). Accessing services and seeking guidance from tax officers is more convenient via DGT online.

The Indonesian Directorate-General of State Taxes has devised a strategy plan for 2020-2024 to address the consequences of the COVID-19 pandemic. The plan's primary objectives are to meet revenue targets by expanding the tax base, enhancing voluntary taxpayer compliance, and ensuring equitable oversight. Nevertheless, the pandemic hindered the implementation of the approach, which impeded face-to-face encounters and necessitated the adoption of novel measures such as regulatory changes, incentivized taxation, and technology-driven services. The research aims to enhance our understanding of digital taxation implementation by making theoretical and practical contributions. The research is pertinent given the current context and issues the tax system encounters.

Tax collection is a process the government uses to gather resources compulsorily, without remuneration, and regularly to support society's general needs (Liuhong, 2022). Throughout its history, Indonesia has employed various tax-collecting systems, including official, semi-self-assessment, withholding, and complete self-assessment (Sahadi & Adi, 2021). Indonesia has used a self-assessment system since 1984 (Juhandi, Fahlevi, & Setiadi, 2019), a tax collection method that allows taxpayers to calculate, pay, and record their taxes (Ladewi et al., 2022).

Obstacles in the tax sector can be seen from two perspectives: 1) the government's view on tax collection and 2) the taxpayer's view on tax liability (Kurniawan et al., 2022). The government confronts tax collection obstacles due to taxpayers striving to avoid their tax obligations. According to Rahayu (2020), this resistance might be active or passive. Passive resistance is a condition caused by the structure of the economy, society, the intellectual development of the population, the morals of citizens, and the tax collection system. In contrast, active resistance from society includes people's efforts to avoid, reduce, smuggle, manipulate, and ignore taxes (Rahayu, 2020).

Digitalization profoundly influences all aspects of daily life, including society's financial structure and governance. Within the context of taxation, digitalization refers to implementing digital infrastructure, disseminating information and consultation support through digital channels, and utilizing digital marketing strategies for tax purposes (Fjord & Schmidt, 2023). Implementing digital technology in tax administration has become crucial to modernizing tax systems in numerous developing countries (Bellon et al., 2022b).

The Indonesian Directorate-General of Taxes (DGT) is actively working on digitizing taxation by implementing a tax digitalization system. This system encompasses electronic Annual Tax Return service providers, a single login feature (part of the 2015-2019 Directorate-General of Taxes program), and the integration of tax data between mandatory ERP platforms and the tax refund server. Integrating tax data offers advantages in terms of openness and efficiency in managing corporate finances, enhances the quality of financial management, and lowers the expenses associated with complying with tax regulations (Nurlis & Ariani, 2020). Moreover, using the e-filing system in the tax system can enhance the efficiency of participants (Natasya et al., 2019) and augment tax revenues (Bellon et al., 2022a). This is in contrast to the findings of (Hanrahan, 2021), which indicate that digitization could hinder governments' capacity to earn increased tax revenues. Given this reasoning, the subsequent hypothesis is put forward:

H₁: Digital taxation implementation impacts on tax revenue obstacles.

Knowledge about taxes refers to the state where an individual fulfills their rights and responsibilities in line with the stipulations of tax laws and regulations (Chandra et al., 2020). Research shows that taxpayers' level of knowledge significantly impacts their adherence to tax responsibilities (Al-Ttaffi, Bin-Nashwan & Amrah, 2020; Fitri, Nurlaela, & Chair, 2022). Susanto and Fiorita (2023) state that individuals who possess tax knowledge are more likely to exhibit tax awareness, leading to a higher level of compliance in fulfilling tax obligations and reporting tax information. Nevertheless, Sudiarto and Junianto (2023) conduct research that contradicts this argument, asserting that taxpayer knowledge does not influence tax compliance. Further investigation is required to examine the correlation between taxpayers' level of knowledge and their compliance with tax regulations.

Furthermore, it is associated with obstacles to tax revenue. Compliance frequently poses the primary barrier to enhancing tax collections (Prichard et al., 2019). Therefore, the research puts out the subsequent hypothesis:

 H_2 : Taxpayer knowledge impacts on tax revenue obstacles.

Tax incentives are government-provided benefits that facilitate taxation for the public. Celani, Dressler, & Wermelinger (2022) categorize tax incentives into four types: 1) tax exemptions, 2) reduced rates, 3) tax allowances, and 4) tax credits.

Researchers are currently discussing the impact and significance of tax incentives on tax revenues (Sebele-Mpofu, Gomera, & Sibanda, 2022). Meiryani, Riantono, and Lidiyawati (2022), regarding MSME taxpayers, find that tax incentives positively and substantially impact taxpayer compliance. The 1974 Laffer Curve Theory posits that lowering tax rates through incentives can increase tax revenue. Conversely, Keynes' theory predicts lower tax rates can decrease government revenues (Erick, 2023).



Figure 1 Research Framework

The research introduces a new approach by examining the role of tax incentives during the COVID-19 pandemic as a moderating factor in the relationship between the implementation of digital taxation and taxpayers' knowledge of obstacles to tax revenue. The research framework is illustrated in Figure 1, while the research hypothesis is formulated as:

H₂: The tax incentive policy moderates the obstacles

of tax revenue brought about by implementing digital taxation.

H₄: The tax incentive policy has a moderating impact on the taxpayer's knowledge regarding obstacles to tax revenue.

II. METHODS

The research aims to establish cause and effect correlations, test the connections between variables, assess causation, examine theories, and identify general patterns that have predictive significance. The participants' perceptions are assessed using a Likert scale of 1 to 5. The scale encompasses statements related to obstacles in tax revenue, understanding of digital tax services, taxpayer knowledge, and incentive policies during the COVID-19 pandemic.

A population refers to a group of units with specific features being examined and from which research findings can be generalized (Shukla, 2020). A sample is a subset of individuals, things, or items selected from a larger population for measurement The (Bhardwaj, 2019). demographic under consideration in the research comprises individuals who have utilized online tax services within the DKI Jakarta. The sample is chosen by convenience sampling, consisting of 50 corporate taxpayers registered. Convenience sampling is a non-probability sampling technique where participants are selected based on their easy availability or accessibility to the researcher. While it is a quick and cost-effective method, it comes with sampling biases that can affect the generalizability of research findings. For this reason, the researcher acknowledges the limitations of this research sample and admits that the research cannot make broad generalizations about entire populations but can serve as a preliminary basis for future research. The selection criteria were at least a bachelor's educational background and experience in managing tax administration in a business.

The data collection technique employed in this research is characterized by its cross-sectional nature, conducted at a specific point in time. The survey method is used to gather primary data by delivering questionnaires to taxpayers who utilize digital tax services. This field research aims to validate the hypothesis by analyzing primary data.

The research employs the SmartPLS Partial Least Square version 3.0, a variance-based structural equation analysis (SEM) technique, for data analysis. PLS enables the concurrent evaluation of measurement and structural models with relatively small sample sizes (Kamis et al., 2020).

PLS is employed to validate hypotheses, elucidate relationships among latent variables, and examine constructs using reflexive and formative indicators. The stages comprise outer model testing, which assesses the validity and reliability; inner model testing, which evaluates the structural aspects; and hypothesis testing. The validity test consists of three components: 1) convergent validity, 2) average variance extracted (AVE), and 3) discriminant validity. Reliability testing includes the evaluation of composite reliability. The second stage assesses the structural model by examining the R-square and Q-square scores to determine its predictive relevance. In the third stage, hypothesis testing is conducted with and without moderation effects. The hypothesis is accepted if the p-value is less than 0.05 at a 5% confidence level (Andrade, 2019). Table 1 illustrates the definition of operational variables.

| Table 1 Definition of Operational Variables | Table 1 | Definition | of Op | erational | Variables |
|---|---------|------------|-------|-----------|-----------|
|---|---------|------------|-------|-----------|-----------|

| Variable | Operational definition | | | | |
|---|--|--|--|--|--|
| Tax Revenue Obstacles (TRO) | The obstacles encountered in tax collection due to taxpayers' attempts to evade their tax responsibilities can be categorized into passive and active resistance. | | | | |
| Digital Taxation Implementation (DT) | Providing taxpayers with digital infrastructure, information support, and consultation makes tax services more efficient, practical, and accessible. | | | | |
| Taxpayer Knowledge (TK) | Understanding tax rights and obligations by the provisions of tax laws and regulations | | | | |
| Tax Incentive Policy (TIP) | The government's policy toward taxpayers about tax reductions. | | | | |

III. RESULTS AND DISCUSSIONS

The research aims to determine the variables that impact taxpayer compliance in Jakarta. The sample comprises 50 corporate taxpayers who utilized digital taxation implementation services before the pandemic. The corporations are from the service industry (29%), the trading industry (40%), and other industries (31%). These individuals are selected based on their role as tax administrators within their respective organizations. Preliminary research is conducted by administering questionnaires to taxpayers employed in companies located in Jakarta. The data collected through the direct distribution of questionnaires serves as a foundation for further analysis of taxpayer compliance behavior.

The research conducts statistical tests to determine the percentage of respondents who agreed with the statements in the questionnaire regarding the independent and dependent variables. The variables examined in the research encompass digital taxation implementation, taxpayer knowledge, and obstacles to tax revenue, which are influenced by taxpayer incentive policy. A descriptive analysis is conducted to ascertain the mean value of each statement item in the research questionnaire. It enables conclusions to be drawn about respondents' perceptions of the research variables and statement items. The Likert scale is employed to measure each statement, with a modified range of 1 to 5. The tax revenue obstacles variable is assessed using six statements, with the highest average score of 4.04 seen in TRO2, specifically for the statement "The taxation system in Indonesia lacks effective oversight to prevent taxpayer fraud." The taxation system in Indonesia is perceived to have inadequate and lenient government oversight regarding taxpayer fraud. The digital taxation implementation variable is assessed using six statements, with the highest average score of 4.04 seen in DT4. The absence of adequate communication from the DGT regarding tax regulations can result in various interpretations and tax issues in the future. The findings indicate that participants perceive a deficiency in the socialization efforts undertaken by tax managers. Four indicators are employed to evaluate the level of taxpayer knowledge. The TK2 indicator "Tax revenue management in Indonesia is effective and on target" has the highest mean score of 4.04, indicating that tax revenue management in Indonesia is deemed highly effective and has successfully met its aims. The tax incentive policy variable during the COVID-19 pandemic is assessed using six statements. The statement "Your company is well aware that the DGT has implemented tax incentives during the COVID-19 pandemic, and the legal basis for these regulations is straightforward and uncomplicated" is referred to as TIP1, which has the highest average score of 4.65. These findings indicate that the participants possess a proficient comprehension of tax advantages available to corporate taxpayers during the COVID-19 pandemic. The comprehensive mean scores of this research variable are shown in Table 2.

Table 2 Mean Scores

| Variable | Indicator | Mean |
|---------------------------------|-----------|------|
| Tax Revenue Obstacles (TRO) | TRO1 | 3.94 |
| | TRO2 | 4.04 |
| | TRO3 | 3.98 |
| | TRO4 | 3.94 |
| | TRO5 | 4.02 |
| | TRO6 | 3.88 |
| Total Mean of TRO | | 3.97 |
| Digital Taxation implementation | DT1 | 3.74 |
| (DT) | DT2 | 3.94 |
| | DT3 | 3.56 |
| | DT4 | 4.04 |
| | DT5 | 4.02 |
| | DT6 | 3.88 |
| Total Mean of DT | | 3.86 |
| Taxpayer Knowledge (TK) | TK1 | 3.94 |
| | TK2 | 4.04 |

| Table 2 Mea | n Scores | (Continued) |) |
|-------------|----------|-------------|---|
|-------------|----------|-------------|---|

| Variable | Indicator | Mean |
|--|-----------|------|
| | TK3 | 3.98 |
| | TK4 | 3.94 |
| Total Mean of TK Tax Incentive Policy (TIP) | | 3.98 |
| Tax Incentive Policy (TIP) | TIP1 | 4.56 |
| | TIP2 | 3.94 |
| | TIP3 | 4.04 |
| | TIP4 | 3.98 |
| | TIP5 | 3.88 |
| | TIP6 | 3.94 |
| Total Mean of TIP | | 4.06 |

Before further data analysis, researchers perform a convergent validity test. Convergent validity involves examining the relationship between question statements and latent variables by assessing loading and cross-loading (Amora, 2021). The research validity is assessed using Smart PLS, specifically by examining the factor loading in the outer loading model. Research indicators are considered valid when the factor loading exceeds 0.50 (Amora, 2021). All indicators have factor loading over 0.70, as determined by validation tests conducted on all variables and statement items. Consequently, all the items related to each variable are considered valid and can serve as effective measuring instruments in the research.

Evaluating reflecting measurement models requires assessing discriminant validity. Discriminant validity aims to determine how much a construct differs from other constructs to capture aspects of the phenomenon not covered by other constructs in the model (Janadari et al., 2018). The discriminant validity test is assessed using the Average Variance Extracted (AVE) value. A validity criterion is met if the AVE exceeds 0.50 (Dzin & Lay, 2021). The variables possess an Average Variance Extracted (AVE) value that exceeds 0.5. Therefore, the indicators used to measure the research variables are deemed valid.

Reliability tests are conducted to demonstrate the instrument's precision, consistency, and accuracy in measuring construct. Cronbach's Alpha is a measure of reliability in SmartPLS. The Cronbach's Alpha value measures the data-gathering procedure and instruments' reliability (Jugessur, 2022). The research variable is deemed reliable if its Cronbach's Alpha value exceeds 0.7 (Jugessur, 2022). The variables utilized in the research exhibit a Cronbach's Alpha value over 0.7, thereby confirming their reliability. The validity and reliability test results are displayed in Table 3.

The R-Square test, also known as the coefficient of determination, is utilized to evaluate the performance

| Variable | | Indicator | Loading Factor | AVE | Cronbach's Alpha |
|------------------------------------|-------|---|-------------------|-------|---------------------|
| Moderasi Z (DT- | TRO) | | 1.076 | 1.000 | 1.000 |
| Moderasi Z (TK→ | TRO) | | 0.734 | 1.000 | 1.000 |
| Tax Revenue Obstacles (TRO) | TRO1. | Has your company thus far deemed the tax policies adopted in Indonesia to be appropriate and fair? | 0.787 | 0.616 | 0.791 |
| | TRO2. | Has your company considered the inadequacy of the taxation system in Indonesia in detecting various fraudulent activities done by taxpayers? | 0.710 | | |
| | TRO3. | Has your company been aware of tax avoidance, which involves lawfully minimizing tax liability by strategically employing provisions in the tax system? | 0.766 | | |
| | TRO4. | Has your company been aware that tax avoidance refers to the legal practice of using tax loopholes to minimize the amount of taxes owed? | 0.877 | | |
| | TRO5. | Is your company aware that Tax Evasion refers to the illegal conduct of deliberately violating provisions in the taxation sector to evade paying taxes? | 0.752 | | |
| | TRO6. | Has your company ever considered tax evasion to be ethically justifiable in cases when the governing law is particularly lax? | 0.742 | | |
| Digital Taxation Implementation | DT1. | Paying taxes online using e-billing helps you make tax payments | 0.761 | 0.589 | 0.860 |
| (DT) | DT2. | Using digital tax services (e-filling, invoice, e-form, and e-registration) helps you to carry out tax reporting and other tax obligations | 0.706 | | |
| | DT3. | You can get information regarding applicable tax regulations using digital-based tax services. | 0.813 | | |

| Variable | | Indicator | | AVE | Cronbach's Alpha |
|-------------------------------|-------|---|-------|-------|---------------------|
| | DT4. | Your company has not received good socialization from the Tax General Council regarding the applicable tax regulations, which can lead to multiple interpretations that will result in the suspension of future taxes. | 0.862 | | |
| | DT5. | Using digital-based tax services is fair for all taxpayers | 0.847 | | |
| | DT6. | Using digital-based tax services requires additional human resources to run the tax system | 0.797 | | |
| Taxpayer Knowledge (TK) | TK1. | The socialization conducted by the DJP thus far has proven effective in fostering taxpayer compliance with their tax obligations | 0.868 | 0.561 | 0.780 |
| | TK2. | The tax revenue management in Indonesia is effective and accurately meets its objectives. | 0.808 | | |
| | ТК3. | Tax sanctions arise only because there is an attempt to avoid or evade taxes | 0.830 | | |
| | TK4. | Your company is currently in a state of tax delinquency | 0.820 | | |
| Tax Incentive Policy (TIP) | TIP1. | The company knows that the Tax General Council issued tax incentives during the COVID-19 pandemic, and the legal basis for the regulations is clear and uncomplicated | 0.880 | 0.506 | 0.716 |
| | TIP2. | Tax incentives do not create a loophole for particular parties engaged in tax avoidance and tax evasion | 0.829 | | |
| | TIP3. | Tax incentives exclusively benefit taxpayers while simultaneously decreasing state revenues | 0.808 | | |
| | TIP4. | The tax incentives implemented by the government during the COVID-19 outbreak are fair for taxpayers | 0.778 | | |
| | TIP5. | Tax incentive policies can reduce state revenues, which in turn can contribute to an increase in state debt | 0.780 | | |
| | TIP6. | The company understands that this tax incentive can augment government tax collections | 0.858 | | |

Table 3 Validity and Reliability Test (Continued)

Table 4 Hypothesis Test

| Hypotheses | Original Sample (O) | Sample Mean (M) | Standard Deviation (STDEV) | T -Statistics (O/STDEV) | P-Values |
|--|------------------------|--------------------|----------------------------------|------------------------------|----------|
| H ₁ : The Impact of Digital Taxation Implementation on Tax Revenue Obstacles | -1.114 | -1.072 | 0.188 | 9.424 | 0.000 |
| H ₂ : The Impact of Taxpayer Knowledge on Tax Revenue Obstacles | -0.444 | -0.397 | 0.095 | 4.679 | 0.000 |
| H ₃ : The Moderating Impact of Tax Incentive Policy on Digital Taxation Implementation to Tax Revenue Obstacles | -0.184 | -0.159 | 0.081 | 2.256 | 0.025 |
| H ₄ : The Moderating Impact of Tax Incentive Policy on Taxpayer Knowledge of Tax Revenue Obstacles | -0.184 | -0.146 | 0.087 | 2.1113 | 0.035 |

of the regression model (Onyutha, 2020). According to the SmartPLS calculation results, the R-squares value for this research is 0.934, which is equivalent to 93.4%. The diversity of tax revenue obstacles may be explained mainly by digital taxation implementation, taxpayer knowledge, and taxpayer incentive policies, which collectively account for 93.4%. The remaining 6.6% is attributed to additional factors not addressed in this research.

The direct effect hypothesis testing is employed to determine if exogenous variables directly impact

endogenous variables. According to the test criteria, if the path coefficient is positive and the p-value is less than or equal to the level of significance (alpha = 5%), it is concluded that the exogenous variable has a positive influence on the endogenous variable. The outcomes of testing research hypotheses are displayed in Table 4.

The impact of digital taxation implementation on tax revenue obstacles variable has a t-test regression coefficient of 9.424, while the t-table value is 2.012 for a sample size (N) of 50. The p-value is calculated to be 0.000. The test findings indicate that the coefficient is both harmful and statistically significant. It is shown that the t-statistic value is greater than the critical value from the t-table, and the p-value is lower than the set threshold of significance (alpha = 0.05). The t-test results indicate a considerable negative impact of digital taxation implementation on tax revenue obstacles. Implementing digital taxation negatively and significantly impacts tax revenue barriers, thus confirming that H_1 is accepted.

The regression analysis shows that taxpayer knowledge significantly impacts tax revenue obstacles, as indicated by a t-test regression coefficient of 4.679. The t-table value for N=50 is 2.012, and the p-value is 0.000, showing a highly significant relationship. The test findings indicate that the coefficient is both harmful and statistically significant. It is reflected in the fact that the t-statistic value is greater than the critical value from the t table, and the p-value is lower than the set threshold of significance (alpha = 0.05). The t-test results indicate a significant impact of taxpayer knowledge on tax revenue obstacles. Taxpayer knowledge negatively and significantly impacts tax revenue barriers, thus confirming H₂ is accepted.

The impact of digital taxation implementation on tax revenue obstacles yields a t-test regression coefficient of 2.256, surpassing the t-table value of 2.012 for a sample size of 50 (N=50), with a p-value of 0.025. The test findings indicate that the coefficient is both harmful and statistically significant. This is evidenced by the t-statistic value being more than the critical value from the t-table and the p-value being lower than the set significance threshold (alpha = 0.05). The test results indicate a considerable impact of digital taxation implementation on tax revenue obstacles. The tax incentive policy strengthens the negative and significant impact of digital taxation implementation on tax revenue obstacles, allowing H₃ to be accepted.

The incentive policy significantly tax strengthens the impact of taxpayer knowledge on obstacles to tax revenue, as evidenced by a t-test regression coefficient of 2.113. This coefficient exceeds the critical value of 2.012 from the t-table, indicating statistical significance. The sample size (N) is 50, and the p-value associated with this coefficient is 0.035. The test findings suggest that the coefficient is both harmful and statistically significant. It is evident from the t-value exceeding the critical value from the t-table, and the p-value is lower than the predetermined significance level (alpha = 0.05). The t-test results indicate a considerable impact of digital taxation implementation on tax revenue obstacles. The tax incentive policy strengthens the negative and significant impact of taxpayer knowledge on tax revenue obstacles, allowing H_4 to be accepted.

The findings confirm⁴ that digital taxation implementation has a negative effect on tax revenue obstacles. The results align with the existing attribution theory, which suggests that the digitalization of tax payment receipts (digital taxation implementation) will lead to an automatic increase in tax revenues. In other words, obstacles to tax revenue will decrease further. The DGT's digital services facilitate tax payment, serving as an external factor that enhances tax collections and reduces tax obstacles. It will encourage compliance among taxpayers in fulfilling their tax responsibilities.

The findings align with research by Mu, Fentaw, and Zhang (2023) revealing that the implementation of digital taxation, also known as the Electronics Tax System, will have a significant and negative effect on obstacles to tax revenues. Chiamaka et al. (2021) find that the digitized tax system used in Nigeria has a negative impact on the obstacles to state tax revenues, based on research conducted in the Amhara region of Ethiopia and other countries.

The research findings are inconsistent with the research carried out (Hanrahan, 2021) on several Organization for Economic Cooperation and Development (OECD) countries. Research indicates that the digitalization process may adversely affect the capacity of countries with significant digital dynamism to generate increased tax revenues. Consequently, digitalization does not contribute to the enhancement of tax revenues.

The findings confirm that taxpayer knowledge has a negative effect on tax revenue obstacles. The research findings align with attribution theory, which essentially clarifies the underlying factors that influence the behavior of individuals, including oneself or others. These factors can be categorized as either internal, such as tax knowledge, taxpayer awareness, and taxpayer compliance, or external, such as service quality and tax sanctions. A person's level of tax knowledge directly correlates with their ability to use it as a determining factor in tax compliance. Insufficient taxpayer information about tax payments increases tax revenue collection obstacles.

The findings align with Newman et al. (2018), which indicate that taxpayer knowledge has a notable negative effect on the limitations or obstacles to state tax revenues, particularly in developing countries. Additionally, research by Fitri et al. (2022), Al-Ttaffi et al. (2020), and Susanto and Fiorita (2023) claim that individuals with knowledge of taxation exhibit a heightened level of tax awareness. This, in turn, promotes compliance in fulfilling tax obligations and reporting.

Contrary to the findings by Sudiarto and Junianto (2023), the research indicates that taxpayer knowledge does not impact tax compliance. It demonstrates that a more profound understanding of taxation does not necessarily ensure taxpayers will adhere to their tax responsibilities.

The findings confirm that tax incentive policies amplify the adverse effects of digital taxation implementation on obstacles to tax revenue. The moderation utilized in this context is the quasimoderator or pseudo-moderation. This moderation acts as a variable that regulates the relationship between the independent variable and the variable in question. Subject to reliance or influenced by another factor. According to attribution theory, combining government policies offering tax incentives and using digitization in tax collection will result in increased tax collections for the state. The findings align with the theory positing that tax incentive policies enhance the effect of digital taxation implementation on obstacles to tax revenue. This notion implies that by offering appropriate tax incentives, taxpayers will be more inclined to comprehend and adhere to tax regulations more effectively. Within this framework, digital taxation implementation plays a crucial role in shaping tax revenue obstacles, while tax incentive policies are designed to enhance the beneficial impact of digital taxation implementation.

The research results align with the research conducted by Ermanis, Putri, & Lawita (2021), which argues that tax incentives can effectively moderate the relationship between the digitalization of tax payments and taxpayer compliance.

The findings confirm that the tax incentive policy strengthens the adverse and significant effects of taxpayer knowledge on obstacles to tax revenue. The moderation effect is categorized as Quasi Moderator or Pseudo Moderation, where this moderating variable influences the relationship between independent and dependent variables. According to attribution theory, tax incentives provided by the government can increase tax collection when taxpayers have more knowledge about and awareness of these incentives.

The research findings align with the research conducted by Lasmono & Urumsah (2022), indicating that tax incentives serve as a moderating factor in the correlation between tax knowledge and the degree of tax compliance among MSMEs. Hence, the provision of tax incentives can impact the extent of tax literacy, thereby aiding in alleviating the tax burden on MSMEs through these incentives. By easing the tax burden, MSME taxpayers are anticipated to find it easier to meet their tax payment responsibilities.

The research findings contradict to the research conducted by Lo, Karamoy, & Gamaliel (2023), who determine that tax incentives and knowledge partially positively affected tax payment compliance. Their research mention that when taxpayers get specific information, it may lead to their reluctance to meet their tax obligations or engage in tax evasion, resulting in non-compliance with tax regulations. The impact of tax knowledge on taxpayer compliance is not significant, as taxpayers keep relying on external entities such as tax advisers and prioritize their business issues.

IV. CONCLUSIONS

The COVID-19 pandemic's worsening economic conditions increase obstacles in tax revenue. The obstacles that arise during the tax collection process take the form of tax evasion and tax avoidance by citizens. Based on the analysis and discussion, it can be concluded that the deployment of digital taxation implementation has a negative and significant effect on tax revenue obstacles. Improved use of the tax administration system will result in strengthened taxpayer compliance. The tax management system consists of a tax payment system and a tax reporting system, which streamline the process of managing taxes and promote the widespread use of tax applications. Similarly, taxpayers' knowledge level negatively and significantly affects the obstacles faced in generating tax revenue. Enhanced taxpayer understanding can lead to improved taxpayer compliance. A comprehensive knowledge of subjects such as Tax Income (PPh), VAT, corporate income tax, and tax sanctions is essential for taxpayers.

Furthermore, the tax incentive policy amplifies the negative and significant impact of implementing digital taxation implementation on obstacles to tax revenue. The tax incentive policy works as a mediator, effectively enhancing the negative relationship between taxpayer knowledge and obstacles to tax revenue. The tax incentive policy amplifies the negative and significant impact of taxpayer knowledge on tax revenue barriers. It is suitable when the government has implemented a program to offer tax incentives, and if taxpayers possess better knowledge and awareness, the government's tax revenues will increase.

The results can have important implications for the academic community in advancing information on obstacles to tax revenue and enhancing comprehension of the implementation of digital taxes and taxpayer awareness.Forpractitioners,thefindingsofthisresearch can serve as valuable input for the Directorate-General of Taxes to enhance the quality of digital services and their influence on tax revenues. Additionally, it can contribute to advancing tax knowledge and awareness among taxpayers. Apart from traditional methods like socialization and counseling, these objectives can be achieved through directly engaging taxpayers. The research limitations lie in the small sample size and the influence variables used are limited to 2 variables, namely: 1) digital taxation and 2) taxpayer knowledge. It is recommended that further research would have a larger sample size and the addition of variables that influence tax revenue barriers.

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