

Economic Digitalization and Tax Compliance: The Moderating Role of Marketplace Usage on Msme Final Income Tax Incentives in Makassar

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ABSTRACT

This study aims to analyze the effect of economic digitalization and MSME Final Income Tax incentives on tax compliance, as well as to examine the moderating role of marketplace usage among Micro, Small, and Medium Enterprises (MSMEs) in Makassar City, Indonesia. Despite the rapid adoption of digital platforms by Indonesian MSMEs, tax reporting compliance in this sector remains low at 40.8%, a phenomenon this study identifies as a “digital paradox” rooted in information asymmetry between taxpayers and tax authorities. A quantitative explanatory approach was employed using a survey method involving 100 MSME actors in Makassar City who hold a Taxpayer Identification Number (NPWP) and actively use marketplace platforms, selected through purposive sampling with the sample size determined by the Slovin formula. Primary data were collected through structured questionnaires measured on a five-point Likert scale and analyzed using Partial Least Squares Structural Equation Modeling (SEM-PLS) with SmartPLS software. The measurement model demonstrated adequate convergent validity ($AVE > 0.50$), discriminant validity ($HTMT < 0.90$), and reliability (Cronbach's Alpha and Composite Reliability > 0.70). The results indicate that economic digitalization ($\beta = 0.32$; $p = 0.001$) and MSME Final Income Tax incentives ($\beta = 0.28$; $p = 0.004$) have a positive and significant effect on tax compliance. Furthermore, marketplace usage is proven to strengthen the relationship between economic digitalization and tax compliance ($\beta = 0.21$; $p = 0.016$), as well as the relationship between tax incentives and tax compliance ($\beta = 0.19$; $p = 0.023$). The model explains 65% of the variance in MSME tax compliance ($R^2 = 0.65$). These findings highlight the importance of integrating digital technology, third-party marketplace data, and fiscal policy in designing sustainable tax compliance models for MSMEs in the digital economy era.

Keywords: Tax Compliance, Economic Digitalization, MSME Final Income Tax, Marketplace, SEM-PLS

INTRODUCTION

Digital transformation has fundamentally reshaped the structure of economic activities and fiscal governance. The shift from conventional transactions to electronic ecosystems has created urgency for tax administration systems to become more adaptive, transparent, and data-driven. Economic digitalization enables automatic transaction recording, which in turn strengthens fiscal monitoring functions. Data from Statistics Indonesia (2024) indicate that more than half of businesses in Indonesia have adopted digital platforms in their operational activities. This phenomenon compels tax authorities to reform reporting and monitoring mechanisms to align with the real-time nature of electronic transactions. Empirically, the use of electronic tax services has been shown to improve reporting efficiency and reduce compliance costs through the simplification of administrative procedures.

Micro, Small, and Medium Enterprises (MSMEs) represent the sector most affected by this transformation while also serving as a crucial foundation for national revenue. With more than 65 million business units contributing 61.9% to Indonesia's Gross Domestic Product (Ministry of Cooperatives and SMEs, 2025), tax compliance

within this sector is a key indicator of fiscal policy effectiveness. At the regional level, Makassar is selected as a strategic research locus due to its position as a center of digital economic growth in Eastern Indonesia, with a total of 31,848 MSMEs (Department of Cooperatives and SMEs of Makassar, 2024). Through the Makassar Smart City initiative, the local government actively promotes digitalization in the informal sector. However, a significant challenge remains in the low synchronization between digital business activities and actual tax compliance. The Directorate General of Taxes (2024) reports that MSME tax reporting compliance has only reached 40.8%, indicating a substantial gap that requires further academic investigation.

To address low compliance, the government has introduced fiscal incentive policies, particularly the MSME Final Income Tax as regulated under Government Regulation No. 55 of 2022. This policy provides tax exemptions for annual turnover up to IDR 500 million and applies a low tax rate for eligible businesses. Theoretically, a reduction in tax rates is expected to lower compliance barriers and motivate taxpayers to fulfill their obligations. Empirical studies by Apriliana and Ratnawati (2025) and Hindayani (2025) support this assumption, showing that tax incentives and tax digitalization are positively associated with MSME tax compliance.

However, the effectiveness of digitalization in promoting compliance does not always yield consistent results. Fitria and Badjuri (2023) argue that digital services do not automatically increase compliance without adequate taxpayer awareness and understanding. Similarly, Setiawan (2024) and Putri et al. (2025) emphasize the importance of tax knowledge and literacy as supporting factors. Furthermore, Saputri (2025) finds that the impact of digitalization on compliance is situational and influenced by taxpayers' economic conditions as a moderating variable. These inconsistencies suggest the presence of a missing link in understanding how technology truly influences taxpayer behavior within the digital ecosystem.

This study identifies this phenomenon as a “digital paradox,” where high levels of technology adoption among MSMEs are not necessarily followed by a proportional increase in tax compliance. The core issue lies in information asymmetry, as most MSME digital transactions occur within marketplace platforms rather than directly within tax administration systems. In this context, platforms such as Shopee and Tokopedia play a crucial role. As third-party reporters, marketplaces provide transparent digital records and automated sales reports that are difficult to manipulate. Therefore, marketplaces are not merely trading tools but function as moderating instruments that validate the accuracy of reported income, thereby enhancing the effectiveness of MSME Final Income Tax incentives.

Unlike prior studies that primarily examine direct effects, this study offers a novel approach by positioning marketplace usage as a moderating variable. It seeks to explore how digital platform ecosystems act as reinforcing factors in the relationship between economic digitalization, tax incentives, and MSME tax compliance. The findings are expected to contribute theoretically to the literature on digital taxation and provide practical recommendations for tax authorities in designing sustainable compliance models in digitally dynamic cities such as Makassar.

LITERATURE REVIEW

Theory of Planned Behavior (TPB)

This study adopts the Theory of Planned Behavior (TPB) developed by Ajzen (1991) as the primary theoretical foundation. TPB posits that human behavior is not spontaneous but is driven by behavioral intention. This intention is shaped by three main determinants. First, Attitude toward Behavior, which reflects taxpayers' attitudes toward government policies, particularly MSME Final Income Tax incentives; tax incentives reduce the economic burden, thereby fostering a positive attitude toward compliance (Apriliana & Ratnawati, 2025). Second, Subjective Norm, which refers to perceptions of social pressure; within the digital ecosystem, transparency has emerged as a new norm among business actors. Third, Perceived Behavioral Control (PBC), which describes the perceived ease or difficulty of performing a behavior; economic digitalization and marketplace usage enhance PBC, as automated systems simplify tax administration processes (Putri et al., 2025).

Tax Compliance

Tax compliance refers to taxpayers' behavior in fulfilling their tax obligations in accordance with prevailing tax regulations (Waluyo, 2010). Conceptually, tax compliance consists of formal compliance and material compliance. Formal compliance relates to the timeliness of registration, reporting, and submission of tax returns, whereas material compliance emphasizes honesty and accuracy in calculating and paying tax liabilities based on actual business conditions.

In the MSME context, low compliance is often influenced by high compliance costs, both in terms of financial burden and administrative complexity. Tax digitalization and fiscal incentives are expected to reduce these burdens, thereby encouraging voluntary tax compliance (Hindayani, 2025).

Economic Digitalization

Economic digitalization in the MSME context refers to the transformation of business activities through the integration of information technology, such as digital payment systems (QRIS, e-wallets), financial recording applications, and digital marketing platforms. Within the TPB framework, digitalization enhances perceived behavioral control by enabling MSME actors to manage transactions and financial documentation more systematically.

Putri et al. (2025) explain that digitalization minimizes recording errors and improves transaction data accuracy. Furthermore, Setiawan (2024) emphasizes that economic digitalization is a prerequisite for effective tax digitalization, as electronically recorded transaction data facilitates reporting through e-Filing and integration with systems such as Coretax. Therefore, economic digitalization logically reduces technical barriers to tax reporting and improves administrative efficiency, ultimately enhancing MSME tax compliance. Based on the theoretical framework and prior empirical findings, the following hypothesis is proposed:

H₁: Economic digitalization has a positive effect on MSME tax compliance.

MSME Final Income Tax Incentives (Government Regulation No. 55 of 2022)

MSME Final Income Tax incentives, as regulated under Government Regulation No. 55 of 2022, represent a fiscal policy that provides a tax rate of 0.5% along with tax exemptions for turnover up to IDR 500 million. Theoretically, within the TPB framework and tax fairness theory, perceptions of a fair and proportional tax burden are expected to foster positive attitudes toward tax compliance.

Apriliana and Ratnawati (2025) find that tax incentives significantly influence MSME tax compliance by reducing financial burdens and enhancing perceptions of fairness within the tax system. However, the effectiveness of these incentives depends not only on the tax rate but also on the ease of implementation. When taxpayers perceive that the tax rate aligns with their business capacity and administrative procedures are simple, their likelihood of compliance increases. Thus, the following hypothesis is formulated:

H₂: MSME Final Income Tax incentives have a positive effect on MSME tax compliance.

Marketplace Usage as a Moderating Variable

Marketplaces such as Shopee and Tokopedia function as third-party platforms that automatically record sales transactions. From the perspective of tax compliance theory and tax accounting, third-party reporting reduces information asymmetry between taxpayers and tax authorities (Slemrod, 2019). Digitally recorded transactions enhance accountability and reduce the likelihood of reporting manipulation.

Saputri (2025) shows that marketplace usage improves the transparency of MSME financial reports and facilitates the reconciliation of sales data. In this study, marketplace usage is positioned as a moderating variable because it strengthens the relationship between economic digitalization, tax incentives, and tax compliance. Economic digitalization integrated with marketplace systems produces more accurate transaction data, thereby

simplifying tax reporting processes. Similarly, tax incentives become more effective when business transactions are automatically recorded within marketplace systems, increasing the detectability of non-compliance.

Marketplace usage is not treated as an independent variable because it does not directly influence tax compliance. Instead, it acts as a moderating mechanism that enhances the effectiveness of economic digitalization and tax incentives through improved transparency and data availability. Based on this argument, the following hypotheses are proposed:

H₃: Marketplace usage strengthens the effect of economic digitalization on MSME tax compliance.

H₄: Marketplace usage strengthens the effect of MSME Final Income Tax incentives on MSME tax compliance.

Based on the formulation of these hypotheses, the research model is presented in Figure 2.1.

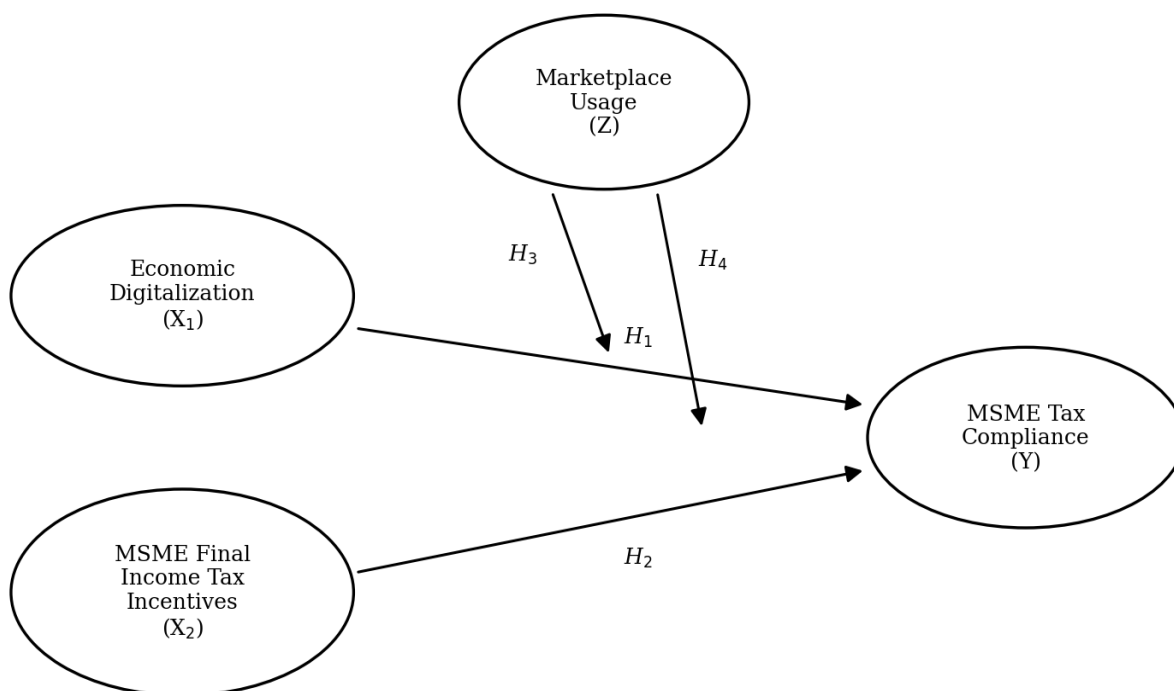


Figure 2.1 Conceptual Research Model

Previous Studies

The following is a summary of previous studies used as references in the development of this research model:

Table 2.1 Summary of Previous Studies

No	Author(s) (Year)	Title	Variables	Findings
1	Apriliana & Ratnawati (2025)	Pengaruh Kebijakan Insentif Pajak Penghasilan bagi UMKM dan Digitalisasi Pajak terhadap Kepatuhan Wajib Pajak	Tax Incentives (X ₁), Tax Digitalization (X ₂), Tax Compliance (Y)	Tax incentives and tax digitalization have a positive and significant effect on MSME tax compliance.

No	Author(s) (Year)	Title	Variables	Findings
2	Fitria & Badjuri (2023)	Faktor-Faktor Kepatuhan Pajak Terhadap Insentif Pajak Sebagai Moderasi dengan Pelaku UMKM di Wilayah Kabupaten Brebes	Digitalization (X), Tax Compliance (Y), Tax Incentives (M)	Digital services do not automatically increase compliance without sufficient taxpayer awareness and understanding.
3	Putri et al. (2025)	Digital Tax Literacy terhadap Kepatuhan Wajib Pajak	Digital Tax Literacy (X), Tax Compliance (Y)	Digital literacy is a key factor; simplified administrative procedures improve reporting efficiency.
4	Saputri (2025)	Digitalisasi Ekonomi dan Perilaku Kepatuhan Wajib Pajak di Era Transformasi Digital	Economic Digitalization (X), Tax Compliance (Y), Economic Condition (M)	Digitalization influences tax compliance; however, its effectiveness is moderated by taxpayers' economic conditions.

RESEARCH METHOD

Type and Research Approach

This study employs a quantitative approach with an explanatory design. The explanatory approach is used to examine causal relationships among the variables and to test the hypotheses formulated in this study. The independent variables are economic digitalization and MSME Final Income Tax incentives, the dependent variable is MSME tax compliance, while marketplace usage is positioned as a moderating variable.

This study aims to analyze the direct effects of economic digitalization and MSME Final Income Tax incentives on MSME tax compliance, as well as to examine the role of marketplace usage in strengthening or weakening these relationships within the context of the digital economy. Through this approach, the findings are expected to provide empirical evidence regarding the dynamics of MSME tax compliance in the digitalization era.

Types and Sources of Data

This study utilizes both primary and secondary data. Primary data are obtained directly through the distribution of structured questionnaires to MSME actors who serve as the research respondents. The questionnaire is developed based on the indicators of each variable, namely economic digitalization, MSME Final Income Tax incentives, marketplace usage, and tax compliance.

In addition, this study also employs secondary data derived from academic literature, accredited scientific journals, current tax regulations, and official publications from the Directorate General of Taxes and other relevant institutions related to economic digitalization and MSME tax compliance. These secondary data are used to strengthen the theoretical foundation and support the empirical analysis of the study.

Population and Sample

The population of this study consists of all Micro, Small, and Medium Enterprises (MSMEs) in Makassar City, totaling 31,848 business units (Department of Cooperatives and SMEs of Makassar, 2024), which have obtained a Taxpayer Identification Number (NPWP).

The sample size was determined using the Slovin formula with a margin of error of 10%: $n = N / (1 + N(e^2)) = 31,848 / (1 + 31,848(0.1^2)) \approx 100$ respondents. The sample size is considered adequate for SEM-PLS analysis, as this method has relatively high statistical power even with a relatively small sample size (below 200).

The sampling technique employed in this study is purposive sampling to ensure that respondents meet specific criteria, namely: (1) active MSME actors domiciled in Makassar City; (2) have obtained a Taxpayer Identification Number (NPWP) and have been operating their business for at least one year; and (3) use marketplace platforms in their business activities.

Data Collection Technique

This study employs a survey method, with data collected through the distribution of structured questionnaires to MSME actors in Makassar City who meet the specified research criteria. The survey method is selected due to the explanatory quantitative nature of the study, which aims to examine causal relationships among variables. Therefore, numerical data are required to enable statistical analysis and to accurately represent respondents' perceptions and behaviors.

The data collected consist of primary quantitative data in the form of respondents' perception scores regarding economic digitalization, MSME Final Income Tax incentives, marketplace usage, and tax compliance. The data are measured using a five-point Likert scale (1 = strongly disagree to 5 = strongly agree) to capture the level of agreement for each variable indicator.

The research instrument is a structured questionnaire developed based on theoretical indicators derived from the Theory of Planned Behavior and the concepts of formal and material tax compliance. Each variable is operationalized into several measurement items that have been adapted to the MSME context and the digital taxation system.

Data collection was conducted through an online platform (Google Forms) to effectively reach respondents who actively use digital platforms. To ensure validity, construct validity and convergent validity were assessed using loading factor analysis and Average Variance Extracted (AVE). Instrument reliability was evaluated using Cronbach's Alpha and Composite Reliability to ensure internal consistency among indicators.

Bias control was implemented through several strategies: (1) maintaining respondent anonymity to reduce social desirability bias; (2) designing neutral and non-leading questions; and (3) ensuring that respondents met the inclusion criteria prior to completing the questionnaire. In addition, data screening procedures, including completeness checks and outlier detection, were conducted to enhance the accuracy of the analysis.

Given that both the independent and dependent variables were measured using self-report questionnaires from the same respondents at a single point in time, this study also acknowledges the potential for common method bias (CMB). Several procedural remedies were employed to minimize this risk, including protecting respondent anonymity, using neutral and non-leading language in all questionnaire items, separating the measurement sections of the predictor and criterion variables within the instrument, and assuring respondents that there were no right or wrong answers. Nevertheless, while these methodological safeguards help to reduce its impact, common method bias cannot be entirely ruled out. This is acknowledged as a limitation of the study, and future research is recommended to employ additional statistical assessments, such as Harman's single-factor test or the marker variable technique, to more rigorously evaluate the presence of common method bias.

Through these procedures, the data collection process is designed to align with the research objectives, namely to generate empirical data that are valid, reliable, and representative in supporting the structural analysis of the relationships among economic digitalization, MSME Final Income Tax incentives, marketplace usage, and MSME tax compliance.

Operational Definition of Variables

Table 3.1 Operational Definition of Research Variables

Variable	Conceptual Definition	Operational Definition	Indicators	Sources	Instrument & Scale
Economic Digitalization (X1)	The transformation of business activities through the utilization of information technology and digital systems in transaction processes, recording, and business management (Putri et al., 2025; Setiawan, 2024).	The level of digital technology utilization by MSME actors in operational activities and financial record-keeping.	1) Use of digital marketing platforms; 2) Use of electronic payment systems (QRIS/e-wallet); 3) Use of digital bookkeeping applications; 4) Integration of transaction data with digital tax systems	Putri et al. (2025); Setiawan (2024); OECD (2021)	Structured questionnaire; Likert scale 1–5 (ordinal)
MSME Final Income Tax Incentives (X2)	A fiscal policy based on Government Regulation No. 55/2022 that sets a 0.5% tax rate and provides tax exemption for certain turnover thresholds to enhance willingness and compliance among MSME taxpayers (Apriliana & Ratnawati, 2025).	MSME actors' perceptions of the ease, fairness, and benefits of Final Income Tax incentives in encouraging tax compliance.	1) Understanding of the 0.5% tax rate; 2) Perceived fairness of tax burden; 3) Ease of tax calculation and payment; 4) Motivation to pay taxes due to lower rates	Government Regulation No. 55 of 2022; Apriliana & Ratnawati (2025); Hindayani (2025); Kirchler (2007)	Structured questionnaire; Likert scale 1–5 (ordinal)
Marketplace Usage (Z)	A third-party digital platform (third-party reporter) that automatically records and documents sales transactions, thereby enhancing transparency and reducing information asymmetry (Saputri, 2025).	The intensity and consistency of marketplace platform usage by MSMEs in conducting digitally recorded sales transactions.	1) Frequency of marketplace usage; 2) Proportion of sales conducted through marketplaces; 3) Availability of automated transaction reports; 4) Consistency between marketplace data and business records	Saputri (2025); OECD (2021); Slemrod (2019)	Structured questionnaire; Likert scale 1–5 (ordinal)

Variable	Conceptual Definition	Operational Definition	Indicators	Sources	Instrument & Scale
MSME Tax Compliance (Y)	Taxpayer behavior in fulfilling tax obligations in accordance with applicable regulations, encompassing both formal and material compliance (Waluyo, 2010).	The level of compliance of MSME actors in fulfilling administrative and substantive tax obligations.	Formal Compliance: 1) Timeliness of tax return filing (SPT); 2) Timeliness of tax payment. Material Compliance: 3) Accuracy in calculating tax payable; 4) Honesty in reporting turnover	Waluyo (2010); Kirchler (2007); Saputri (2025)	Structured questionnaire; Likert scale 1–5 (ordinal)

Data Analysis Technique (SmartPLS)

The data analysis technique employed in this study is Structural Equation Modeling based on Partial Least Squares (SEM-PLS) using SmartPLS software. SEM-PLS is selected due to its ability to accommodate research models involving latent variables and moderating relationships. In addition, SEM-PLS does not require strict normal data distribution, making it suitable for relatively small sample sizes, and is capable of handling complex models with reflective indicators simultaneously. The analysis is conducted through the following stages:

1. Outer Model Evaluation (Measurement Model). Convergent validity is assessed based on loading factor values > 0.70 and Average Variance Extracted (AVE) > 0.50 . Discriminant validity is evaluated using the Fornell-Larcker criterion or Heterotrait-Monotrait Ratio (HTMT) < 0.90 . Reliability is measured using Composite Reliability (CR) and Cronbach's Alpha with threshold values > 0.70 .
2. Inner Model Evaluation (Structural Model). The path coefficient (β) assesses the direction and magnitude of relationships between variables; the coefficient of determination (R^2) measures the variance explained in the dependent variable; the effect size (f^2) evaluates the relative impact of each independent variable; and predictive relevance (Q^2) assesses the model's predictive capability.
3. Moderation Analysis. The moderating effect of marketplace usage (Z) is tested using the Product Indicator Approach. The moderation effect is considered significant if the interaction terms ($X_1 \times Z$ and $X_2 \times Z$) have a statistically significant effect on Y .
4. Hypothesis Testing. Hypothesis testing is conducted using the bootstrapping method with a significance level of 5%. A hypothesis is accepted if the t-statistic > 1.96 and the p-value < 0.05 .

Research Ethics

This study ensures the confidentiality of respondents' identities (anonymity), and all data are used solely for academic purposes. Participation is voluntary, with informed consent obtained at the beginning of the questionnaire.

RESULTS AND DISCUSSION

Descriptive Statistics

Descriptive statistics are used to present the distribution of data for each research variable. The results of data processing indicate the mean and standard deviation values as follows:

Table 4.1 Descriptive Statistics of Research Variables

Variable	Mean	Standard Deviation
Economic Digitalization (X1)	3.87	0.64
MSME Final Income Tax Incentives (X2)	3.75	0.71
Marketplace Usage (Z)	3.92	0.68
MSME Tax Compliance (Y)	3.81	0.66

The mean values of all variables range from 3.75 to 3.92, with standard deviation values below 1, indicating relatively low variability in respondents' answers.

Measurement Model Evaluation (Outer Model)

Convergent Validity

Convergent validity is assessed based on loading factor values and Average Variance Extracted (AVE). The test results indicate that all indicators have loading factor values above 0.70. The AVE values for each variable are presented as follows:

Table 4.2 Average Variance Extracted (AVE) Values

Variable	AVE
Economic Digitalization (X1)	0.62
MSME Final Income Tax Incentives (X2)	0.59
Marketplace Usage (Z)	0.64
MSME Tax Compliance (Y)	0.61

All variables have AVE values above 0.50, indicating adequate convergent validity.

Discriminant Validity

Discriminant validity was assessed using the Fornell-Larcker criterion. The results indicate that the square root of the AVE for each variable is greater than the correlations with other variables. In addition, the Heterotrait-Monotrait Ratio (HTMT) values are below 0.90, indicating satisfactory discriminant validity.

Reliability Test

Reliability was measured using Cronbach's Alpha and Composite Reliability. The test results are presented as follows:

Table 4.3 Reliability Test Results

Variable	Cronbach's Alpha	Composite Reliability
Economic Digitalization (X1)	0.88	0.91
MSME Final Income Tax Incentives (X2)	0.86	0.90
Marketplace Usage (Z)	0.89	0.92

Variable	Cronbach's Alpha	Composite Reliability
MSME Tax Compliance (Y)	0.87	0.91

All variables have values above 0.70, indicating that the constructs are reliable and demonstrate satisfactory internal consistency.

Structural Model Evaluation (Inner Model)

Coefficient of Determination (R^2)

The coefficient of determination was used to measure the ability of the independent variables to explain the dependent variable.

Table 4.4 R-Square Values

Dependent Variable	R^2
MSME Tax Compliance (Y)	0.65

The R^2 value of 0.65 indicates that 65% of the variance in MSME tax compliance can be explained by economic digitalization, MSME Final Income Tax incentives, and marketplace usage within the research model, while the remaining 35% is explained by other variables outside the model.

Predictive Relevance (Q^2)

Predictive relevance (Q^2) is used to assess the predictive capability of the model for the dependent variable. The test results show the following Q^2 values:

Table 4.5 Predictive Relevance Values (Q^2)

Dependent Variable	Q^2
MSME Tax Compliance (Y)	0.42

The Q^2 value of 0.42 (> 0) indicates that the model has predictive relevance and demonstrates adequate predictive capability.

Effect Size (f^2)

The effect size (f^2) values for each variable are presented as follows:

Table 4.6 Effect Size (f^2) Values

Variable	f^2
Economic Digitalization (X1)	0.15
MSME Final Income Tax Incentives (X2)	0.12
Marketplace Usage (Z)	0.14

Hypothesis Testing (Bootstrapping)

Hypothesis testing was conducted using the bootstrapping technique with a significance level of 5%. The results are presented in Table 4.7.

Table 4.7 Hypothesis Testing Results

Hypothesis	Relationship	Coefficient	t-statistic	p-value
H1	$X1 \rightarrow Y$	0.32	3.45	0.001
H2	$X2 \rightarrow Y$	0.28	2.98	0.004
H3	$X1 \times Z \rightarrow Y$	0.21	2.45	0.016
H4	$X2 \times Z \rightarrow Y$	0.19	2.31	0.023

Summary of Hypothesis Testing Results

Table 4.8 Summary of Hypotheses

Hypothesis	Statement	Result
H1	Economic digitalization has a positive effect on MSME tax compliance	Supported
H2	MSME Final Income Tax incentives have a positive effect on MSME tax compliance	Supported
H3	Marketplace usage moderates the effect of economic digitalization on MSME tax compliance	Supported
H4	Marketplace usage moderates the effect of MSME Final Income Tax incentives on MSME tax compliance	Supported

DISCUSSION

The Effect of Economic Digitalization on MSME Tax Compliance

Based on the hypothesis testing results, economic digitalization has a positive and significant effect on MSME tax compliance, with a path coefficient value of 0.32 and a p-value of less than 0.05. This finding confirms that the acceleration of digital technology adoption in business operations directly contributes to improving tax compliance. From the perspective of the Theory of Planned Behavior (TPB), digitalization functions as a key determinant that strengthens the dimension of Perceived Behavioral Control (PBC). The availability of digital tools such as cloud-based cashier systems, QRIS payments, and digital wallets creates technical convenience in recording transactions in real time. This convenience significantly reduces administrative barriers and calculation errors, which have long been major obstacles for MSME actors in fulfilling their tax obligations.

Empirically, these results are consistent with the studies of Putri et al. (2025) and Setiawan (2024), which state that digitalization creates efficiency that encourages voluntary tax compliance. The relatively high coefficient value (0.32) indicates that economic digitalization is a variable with strong explanatory power in this model. In addition, the effect size (f^2) value of 0.15 indicates that digitalization has a moderate effect on the tax compliance model. The availability of accurate digital transaction data has been proven to minimize information asymmetry between taxpayers and tax authorities, thereby creating greater transparency in revenue reporting.

The Effect of MSME Final Income Tax Incentives on Tax Compliance

The test results indicate that MSME Final Income Tax incentives have a positive and significant effect on tax compliance, with a path coefficient value of 0.28 and a p-value of less than 0.05. This finding demonstrates that accommodative fiscal policies, as regulated under Government Regulation No. 55 of 2022, are effective in motivating MSME taxpayers in Makassar to fulfill their tax obligations. Within the framework of the Theory of Planned Behavior (TPB), this influence primarily operates through the dimension of Attitude toward Behavior. The tax exemption policy for annual turnover up to IDR 500 million and the implementation of a low tax rate are capable of shaping taxpayers' perceptions of fairness within the tax system. This positive attitude toward tax fairness subsequently encourages taxpayers' intention to comply voluntarily and consciously with their tax obligations.

These findings support previous studies conducted by Apriliana and Ratnawati (2025) and Hindayani (2025). Although the effect is statistically significant, a deeper analysis through the effect size (f^2) value shows a score of 0.12, indicating that tax incentives have a small to moderate effect on the tax compliance model. The coefficient value, which is slightly lower than that of economic digitalization (0.32), implies that fiscal incentive policies cannot operate effectively in isolation. To maximize the benefits of tax incentives, supportive technological integration is necessary to simplify the tax reporting process, allowing the intention to comply to be translated into actual compliance behavior.

The Role of Marketplace Usage in Moderating the Effect of Economic Digitalization on Tax Compliance

The moderation test results indicate that the interaction between economic digitalization and marketplace usage has a coefficient value of 0.21 ($p < 0.05$). This finding demonstrates that marketplace usage significantly strengthens the effect of economic digitalization on tax compliance. This phenomenon addresses the frequently observed “digital paradox,” in which digitalization alone may not be sufficiently strong to change compliance behavior without the presence of an ecosystem that enforces transparency.

Marketplaces such as Shopee and Tokopedia function as third-party reporters that provide systematic and difficult-to-manipulate automatic transaction recording systems. From the perspective of the Theory of Planned Behavior (TPB), the existence of these platforms further strengthens taxpayers' Perceived Behavioral Control (PBC). MSME actors perceive greater control and convenience because annual sales reports can be instantly downloaded for tax return reporting purposes. This analysis is consistent with Saputri (2025), who emphasized that transparency systematically enforced by digital platforms can effectively reduce opportunities for tax avoidance from a technical perspective.

The Role of Marketplace Usage in Moderating the Effect of Final Income Tax Incentives on Tax Compliance

The results of the interaction test between Final Income Tax incentives and marketplace usage produced a coefficient value of 0.19 ($p < 0.05$). This indicates that marketplace usage significantly strengthens the effectiveness of tax incentives in improving tax compliance. With valid transaction documentation available through marketplaces, MSME actors become more confident in claiming tax incentives because they possess strong supporting evidence regarding the turnover threshold below IDR 500 million.

This interaction reflects a synergy between psychological factors (positive attitudes toward tax incentives) and technical factors (behavioral control facilitated by digital platforms). Although the moderation coefficient value (0.19) is the smallest within the model, the effect size (f^2) remains within a relevant category for explaining variations in tax compliance. This finding suggests that tax incentive policies will achieve maximum effectiveness when implemented within an integrated digital ecosystem such as a marketplace platform. These findings are also aligned with the government's policy direction toward integrating third-party data to optimize the tax base in the digital economy era.

CONCLUSION AND RECOMMENDATIONS

Conclusion

This study aimed to analyze the effect of economic digitalization and Final Income Tax incentives on MSME tax compliance, as well as to examine the role of marketplace usage as a moderating variable. The findings indicate that economic digitalization and Final Income Tax incentives have a positive effect on tax compliance, while marketplace usage has been proven to strengthen both relationships.

From a theoretical perspective, this study reinforces the relevance of the Theory of Planned Behavior in explaining tax compliance behavior and extends the model by incorporating marketplace usage as a moderating variable within the digital ecosystem context. Practically, the findings suggest that improving tax compliance depends not only on fiscal policies but also on the integration of digital systems that support transparency and data accuracy.

Limitations and Future Research Directions

This study is subject to several limitations that should be considered when interpreting the findings. First, the use of a cross-sectional design has important implications for causal inference. Although the Theory of Planned Behavior implies a causal sequence (attitudes → intentions → behavior), cross-sectional data cannot establish temporal precedence among the variables. Consequently, the path coefficients reported in this study should be interpreted as associations rather than definitive causal effects. Second, the possibility of reverse causality cannot be ruled out; for instance, taxpayers who are inherently more compliant may be more inclined to adopt digital tools and marketplace platforms, rather than digitalization driving compliance. Third, unmeasured confounding variables, such as business size, education level, tax morale, or prior interactions with tax authorities, may influence both digitalization adoption and compliance behavior, potentially biasing the estimated relationships. Fourth, as discussed in the methodology section, the reliance on self-report measures collected from the same respondents at a single point in time raises the possibility of common method bias, which the procedural remedies employed can reduce but not eliminate.

In terms of generalizability, this study was conducted in Makassar City, a center of digital economic growth in Eastern Indonesia supported by the Makassar Smart City initiative. The findings are likely to be applicable to other Indonesian urban centers with comparable MSME characteristics, digital infrastructure, and marketplace penetration, and may also offer insights for other developing countries experiencing rapid digitalization and pursuing third-party data integration in tax administration. However, several contextual factors may limit generalizability, including the specific marketplace landscape in Indonesia (dominated by platforms such as Shopee and Tokopedia), the particular design of the Final Income Tax incentive under Government Regulation No. 55 of 2022, and the socio-economic characteristics of MSMEs in Makassar. Caution is therefore warranted when extrapolating these findings to rural areas, regions with lower digital adoption, or jurisdictions with different fiscal incentive structures.

Based on these limitations, future studies are recommended to: (1) employ longitudinal designs or quasi-experimental methods (e.g., difference-in-differences designs exploiting policy changes) to strengthen causal inference and establish temporal precedence; (2) include additional variables such as tax literacy, tax morale, and trust in tax authorities to reduce omitted-variable concerns; (3) apply statistical assessments of common method bias, such as Harman's single-factor test or the marker variable technique; and (4) replicate the model in other cities and countries to test the boundary conditions of the moderating role of marketplace usage.

RECOMMENDATIONS

1. For the Directorate General of Taxes: It is recommended to strengthen strategic collaboration with marketplace providers through data integration schemes (API integration) to validate MSME turnover in real time, thereby reducing the tax reporting gap.

2. For Marketplace Platform Providers: It is necessary to develop a “Digital Tax Corner” feature within marketplace applications to assist MSME partners in downloading annual sales summaries that are already aligned with the reporting format of the Final Income Tax Return (SPT PPh Final).
3. For the Government of Makassar City: Through the Makassar Smart City initiative, the local government should provide more intensive education regarding the importance of synchronizing digital sales records with fiscal obligations as part of digital business literacy.

Implications for MSME Taxpayers

Beyond the policy recommendations directed at the government and marketplace providers, the findings of this study carry direct practical implications for MSME actors themselves. First, MSMEs can leverage marketplace transaction data, such as automated sales recaps and downloadable annual sales reports, to simplify their tax reporting and substantially reduce compliance costs, since these records eliminate the need for manual bookkeeping reconciliation when preparing the Final Income Tax Return (SPT PPh Final). Second, the consistent use of digital platforms for record-keeping provides MSMEs with credible and verifiable documentation that can substantiate their eligibility for tax incentives, reducing the risk of disputes with tax authorities. Third, understanding the tax exemption threshold of IDR 500 million in annual turnover under Government Regulation No. 55 of 2022 is essential; marketplace dashboards enable MSME actors to monitor their cumulative turnover in real time and therefore to determine accurately when their tax obligations commence. Fourth, MSMEs that integrate digital payment systems, digital bookkeeping applications, and marketplace platforms into a unified workflow are better positioned to translate their intention to comply into actual compliance behavior, thereby minimizing exposure to administrative sanctions while maximizing the benefits of the available fiscal incentives.

Ethical Considerations

This research involved human participants through a voluntary survey. Ethical approval for this study was obtained from the relevant institutional research ethics committee. Informed consent was obtained from all respondents at the beginning of the questionnaire, participation was entirely voluntary, and the anonymity and confidentiality of respondents' identities were maintained throughout the research process. All data were used solely for academic purposes.

Conflict Of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

Data Availability

The data supporting the findings of this study are available from the corresponding author upon reasonable request. The data are not publicly available due to respondent confidentiality and privacy considerations.

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