

TAX INNOVATION, DIGITAL PAYMENT SYSTEMS, AND FINANCIAL SUSTAINABILITY OF MSMEs: TAX COMPLIANCE AS MEDIATING



<https://journal.unpas.ac.id/index.php/jrak/index>

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Article Info

History of Article

Received: 4/3/2026

Revised: 19/4/2026

Accepted: 24/4/2026

Available Online: 28/4/2026

Jurnal Riset Akuntansi Kontemporer

Volume 18, No. 1, April 2026,

Page 189-204

ISSN 2088-5091 (Print)

ISSN 2597-6826 (Online)

<https://doi.org/10.23969/jrak.v18i1.43213>

Keywords: financial performance, financial sustainability, MSME, payment system digitalization, tax compliance, tax innovation

Abstract

Formally registered MSMEs in Indonesia face growing fiscal and technological pressures that may affect their financial performance and long-term sustainability. This study aims to examine how tax innovation and payment system digitalization influence financial performance and financial sustainability through tax compliance. Using an explanatory quantitative design, data were collected from 455 formal MSMEs through a structured questionnaire and analyzed using SEM-PLS. The findings show that tax compliance significantly improves financial performance and financial sustainability and partially mediates the effects of tax innovation and digital payment systems. In addition, tax innovation and digital payment adoption directly strengthen compliance and contribute positively to financial outcomes. These results indicate that sustainable MSME finance depends not only on operational efficiency but also on institutional adaptation and compliant fiscal behavior. This study contributes to MSME taxation literature by integrating agency and institutional perspectives to explain the role of compliance in strengthening financial sustainability.

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play an essential role in Indonesia's economic structure. Beyond contributing to national income, MSMEs function as a major source of employment and income distribution, particularly in rural and semi-urban areas. Recent statistics show that MSMEs account for more than 97 percent of the national workforce and contribute over 61 percent of Indonesia's Gross Domestic Product (GDP), highlighting their significance not only as drivers of economic growth but also as stabilizing actors during periods of structural change and economic uncertainty (Kurniawan et al., 2023; Maswin & Sudrajad, 2023). Despite this substantial contribution, MSMEs in Indonesia are characterized by considerable institutional diversity. Many enterprises continue to operate informally and remain outside the formal fiscal system (Zuhroh et al., 2025), while others have transitioned into the formal economy and are therefore subject to taxation policies and regulatory oversight (Granfon et al., 2023). This study focuses on tax-registered MSMEs that operate under simplified turnover-based taxation schemes and digital reporting mechanisms. Compared with informal enterprises, tax-registered MSMEs interact more directly with fiscal policy reforms and institutional regulations, making them an appropriate context for examining how taxation practices influence financial outcomes (Saptono et al., 2024).

The business environment faced by MSMEs has become increasingly complex. Intensifying market competition, technological transformation, and evolving regulatory frameworks create new pressures for small enterprises attempting to maintain financial stability and competitiveness (Dwifanty et al., 2025; Safitri & Dinana, 2025). Limited access to financing, operational constraints, and administrative requirements further complicate the ability of MSMEs to adapt to these changes (Dwifanty et al., 2025). Within this environment, taxation has become an important managerial concern because fiscal obligations directly affect cash flow, profitability, and the long-term financial sustainability of enterprises (Safitri & Dinana, 2025; Wahyudi et al., 2024). In response to these challenges, the Indonesian government has introduced several reforms aimed at strengthening MSMEs participation in the formal fiscal system. These reforms include simplified taxation regimes, self-assessment mechanisms, and digital administrative platforms designed to improve transparency and efficiency within the taxation process (Aditya, 2020; Judijanto, 2024). Nevertheless, challenges related to tax compliance remain prevalent among MSMEs, often influenced by limited tax literacy, perceived complexity of tax regulations, and varying levels of institutional trust (Aditya, 2020; Anindya, 2025).

Within this context, tax compliance emerges as an important factor shaping the financial trajectory of MSMEs. Institutional theory suggests that compliance reflects not only adherence to legal obligations but also the internalization of formal rules that guide organizational behavior and strengthen legitimacy within the institutional environment (Sofianti, 2023). Firms that operate in accordance with regulatory expectations are more likely to develop structured financial management practices and transparent reporting systems. These practices improve access to financial institutions, strengthen relationships with regulators, and enhance organizational credibility (Biru, 2020; Jeandry, 2023; San et al., 2023). Previous studies indicate that higher levels of tax compliance are associated with stronger financial discipline, improved access to financing, and greater participation in formal economic programs, all of which contribute to long-term business sustainability (Abiola and Fola 2024; Wijaya et al. 2025). In this sense, tax compliance can be understood not only as a regulatory outcome but also as an institutional capability that supports sustainable financial performance.

While institutional theory highlights the influence of regulatory structures and institutional expectations, agency theory provides insight into how MSME owners make financial decisions within resource-constrained environments. Business owners frequently face competing priorities related to operational costs, liquidity management, and regulatory obligations. These pressures shape how financial responsibilities are managed and how organizational resources are allocated (Anindya, 2025; Judijanto, 2024). When regulatory systems are perceived as transparent, accessible, and supportive, firms are more likely to align their financial behavior with institutional expectations (da Silva et al., 2024). Consequently, compliance practices may emerge not solely as a result of regulatory enforcement but also as a managerial response shaped by economic incentives and institutional conditions.

In this regard, tax innovation and payment system digitalization represent two institutional mechanisms that may encourage stronger compliance behavior among MSMEs. Tax innovation refers to policy reforms and administrative improvements that simplify taxation procedures, reduce compliance costs, and encourage voluntary participation in the formal fiscal system (Aditya, 2020; Azhari & Prabawati, 2023). Digital tax reporting systems, for example, can streamline administrative processes and reduce procedural complexity for small businesses. However, the effectiveness of such innovations depends on the readiness of MSMEs to adopt digital systems and integrate them into daily business operations (Satyadini & Rosid, 2024). At the same time, the increasing adoption of digital payment technologies has transformed financial transactions among MSMEs. Digital payment systems facilitate real-time transaction recording, improve financial documentation accuracy, and support more transparent financial management practices (Wijanarko & Saraswati, 2024). As these technologies become more widely adopted, they may also strengthen governance practices and support more consistent compliance behavior within firms (Ilyas, 2024; Nurchayati et al., 2024; Polo Orellana et al., 2025).

Although existing research has examined tax compliance, digital financial adoption, and MSME financial performance, these themes are often investigated independently rather than within a unified analytical framework. Studies focusing on tax compliance typically emphasize behavioral and institutional determinants such as tax knowledge, perceived fairness of the tax system, and trust in government institutions (Abiola & Fola, 2024; Darmayasa et al., 2021; Wijaya et al., 2025). In contrast, research on digital financial technologies tends to concentrate on issues of operational efficiency, financial inclusion, and transaction transparency among small businesses (Ilyas, 2024; Nurchayati et al., 2024; Polo Orellana et al., 2025). While these streams of research have generated valuable insights, relatively limited attention has been given to how fiscal policy innovation and digital payment systems jointly shape compliance behavior and subsequently influence financial performance and long-term financial sustainability among MSMEs. Furthermore, tax compliance is often conceptualized merely as an outcome variable rather than as a mechanism that links institutional reforms with organizational financial outcomes (Henriette & Erasashanti, 2023; Saptono et al., 2024). Addressing this gap, the present study develops an integrated framework that combines institutional theory and agency theory to examine how tax innovation and payment system digitalization influence tax compliance and subsequently affect financial performance and financial sustainability among MSMEs.

By positioning tax compliance as a mediating institutional mechanism, this study contributes to the literature on MSME taxation and financial governance in several ways. First, it highlights the interaction between fiscal policy innovation and digital transformation in shaping organizational financial behavior. Second, it provides empirical evidence regarding the role of compliance practices in supporting sustainable financial outcomes among small enterprises. Finally, the findings offer practical insights for policymakers and MSME practitioners seeking to strengthen the resilience of the MSME sector. Policies that combine administrative simplicity with digital financial integration may encourage compliance while simultaneously supporting the long-term financial sustainability of small businesses.

METHOD

This investigation is conducted using a theory-driven quantitative strategy aimed at examining causal relationships among conceptual variables. Referring to the methodological guidance of (Sekaran & Bougie, 2016), the study is structured to empirically evaluate proposed hypotheses and to analyze the interconnections between latent constructs within a structural framework. Information was obtained through a single-round survey, capturing responses from MSMEs at one specific period to reflect their attitudes and operational behavior in relation to taxation issues and digital payment adoption. The use of quantitative techniques enables systematic measurement, objective hypothesis testing, and the application of advanced statistical modeling to assess complex variable interactions.

This study focuses on MSMEs in Indonesia across various economic sectors, including commercial activities, manufacturing operations, service provision, and creative-based businesses.

Given the absence of an integrated national database that categorizes companies based on their tax profiles and digital transformation status, the use of probability sampling is not feasible. Therefore, this study relies on purposive selection criteria to ensure the relevance of respondents to the research objectives. Only business owners or individuals holding managerial positions were invited to participate, provided that their companies had been in operation for at least two years, were officially registered, complied with SME tax regulations, and had practical experience in both cash-based and digital payment transactions. Following the data screening and validation process, 455 respondents were deemed eligible for analysis. This number exceeds the minimum acceptable sample size for SEM-PLS modeling, thereby enhancing statistical power and strengthening the structural model assessment.

Empirical data for this study was obtained through a structured survey instrument distributed to SME owners and managerial representatives via face-to-face distribution and online platforms. The questionnaire were developed to explore participants’ perspectives, practical experiences, and behavioral patterns regarding tax issues, the adoption of digital payment systems, as well as aspects of financial performance and business sustainability (Hardani et al., 2020). Measurement indicators were derived from previously validated studies and then adapted to the specific characteristics of Indonesian SMEs, thereby enhancing content relevance. Before widespread distribution, the instrument underwent pre-testing to assess terminological clarity, internal consistency, and overall reliability. Feedback from this stage was used to implement several improvements to enhance the quality of the final version.

Respondents provided answers using a five-point agreement scale, with values ranging from strong disagreement to strong agreement (Sekaran & Bougie, 2016). The five-point format was deliberately chosen because it is easier to understand and suitable for respondents from diverse educational and business backgrounds, thereby allowing perceptions to be captured in a structured yet accessible manner. This study involves six latent variables, each of which is operationalized through several indicators:

Table 1. Operational Variable

Variable	Operational Definition	Item 1	Item 2	Item 3	Item 4
Tax Compliance (TC)	The level of compliance of business actors in reporting and paying taxes accurately, timely, and in accordance with tax regulations (NADAH and CHRAIBI, 2025).	TC.1: How timely is your company in submitting the required tax reports?	TC.2: How accurate are the tax reports submitted by your company?	TC.3: How punctual is your company in making tax payments?	TC.4: To what extent does your company comply with all applicable tax regulations?
Tax Innovation (TI)	Tax innovation refers to new policies or mechanisms designed to simplify tax administration, reduce compliance costs, and enhance taxpayer participation (Safitri, 2025).	TI.1: To what extent has your company benefited from the simplification of tax regulations implemented by the government?	TI.2: How often does your company take advantage of available tax incentives?	TI.3: To what extent does your company use digital platforms to report taxes?	TI.4: How would you rate the ease of the tax reporting procedures after the introduction of digital innovations?
Payment System Digitalization (PSD)	The use of digital payment systems by business actors to enhance transaction transparency and operational efficiency (Chaidir, Ruslaini, and Irawan, 2025).	PSD.1: How frequently does your company use digital payment systems in daily transactions?	PSD.2: To what extent is the digital payment system integrated with other operational systems in your company?	PSD.3: How efficient is your company in using digital payment systems to record financial transactions?	PSD.4: How would you rate the security of the digital payment system your company uses for transactions?

Variable	Operational Definition	Item 1	Item 2	Item 3	Item 4
Financial Performance (FP)	The level of a firm's financial achievement reflecting profitability, growth, and cost efficiency (Sinaga, Irene, and Christanti, 2023).	FP.1: To what extent has your company achieved the profitability targets set?	FP.2: What is the sales growth your company has achieved over a certain period?	FP.3: How well has your company managed costs efficiently to increase profitability?	FP.4: What is the return on investment (ROI) of your company?
Financial Sustainability (FS)	The ability of a firm to maintain financial stability and ensure long-term operational continuity (Sinaga et al., 2023).	FS.1: To what extent is your company able to maintain a stable cash flow in the long term?	FS.2: How does your company manage financial risks to ensure operational continuity?	FS.3: To what extent can your company withstand economic uncertainties and market changes?	FS.4: To what extent can your company maintain operational continuity without relying on external financing?

Source: Author's (2025)

All questionnaire items were measured using a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5). This scale allows respondents to express their perceptions and behavioral tendencies consistently across constructs. To minimize response bias and acquiescence effects, several statements were intentionally worded in the opposite direction of the construct. These negatively worded items were reverse-coded during data preparation to ensure that higher scores consistently represented higher levels of the intended constructs.

Due to the limited availability and reliability of audited financial statements among MSMEs, subjective performance measures were employed, which aligns with previous MSME research. In contexts where formal financial disclosure is often absent, perceptual financial indicators serve as appropriate proxies for objective outcomes. Many MSMEs lack audited financial records, so using subjective assessments of financial performance is considered suitable for capturing the financial dynamics within this sector, as supported by prior studies (Hair et al., 2019).

To test the proposed conceptual framework and hypothesized relationships, this study applied a variance-based Structural Equation Modeling (SEM) approach using Partial Least Squares (PLS) techniques. SmartPLS 3 software was used, chosen for its effectiveness in predictive research and its flexibility in estimating complex models involving multiple latent constructs (Hair et al., 2019). This approach is also well-suited for MSME survey data, which often deviates from strict normal distribution assumptions. The analysis included two main components: evaluating the measurement model and assessing the structural model.

The measurement model analysis verified the adequacy of the indicators representing each construct, checking for internal consistency, convergent validity, and discriminant validity. Internal consistency reliability was evaluated through Cronbach's alpha and composite reliability, with values exceeding 0.70 indicating adequate consistency. Convergent validity was assessed by examining outer loadings and Average Variance Extracted (AVE), ensuring they met the required benchmarks (Sarstedt et al., 2021). Following confirmation of the measurement model, the structural model was tested for path coefficients, R² values, and predictive relevance using bootstrapping with 5,000 resamples, along with mediation testing to explore the indirect influence of tax compliance on financial outcomes.

RESULTS

A descriptive statistical assessment was performed to outline respondent characteristics and to capture the overall condition of MSMEs included in the study. The analysis was based on

455 valid responses obtained from active business owners and managers operating under Indonesian MSME tax regulations. Using mean and standard deviation calculations derived from a five-

point agreement scale, the results indicate that most constructs demonstrate average scores within the mid-to-upper range. This pattern reflects generally favorable attitudes toward tax compliance, taxation-related innovation, and the implementation of digital payment systems among the participating enterprises.

Table 2. Descriptive Statistics

Variable	Min	Max	Mean	Standard Deviation
Tax Compliance (TC)	2.00	5.00	3.68	0.69
Tax Innovation (TI)	2.10	5.00	3.59	0.71
Payment System Digitalization (PSD)	1.90	5.00	3.72	0.73
Financial Performance (FP)	2.00	5.00	3.65	0.68
Financial Sustainability (FS)	2.10	5.00	3.70	0.66

Source: Author's statistical analysis (2026)

Table 2 presents the descriptive statistics of the latent variables, providing an initial overview of respondents' perceptions of the research constructs. Tax Compliance (TC) shows a mean value of 3.68, reflecting a relatively strong and consistent level of tax compliance. Tax Innovation (TI) demonstrates a positive perception, with a mean value of 3.59, suggesting MSMEs' general acceptance of tax policy innovations and administrative reforms. Meanwhile, Payment System Digitalization (PSD) has the highest mean value at 3.72, highlighting the increased adoption of digital payment systems in MSME operations. The mean values for Financial Performance (FP) and Financial Sustainability (FS) are 3.65 and 3.70, respectively, indicating that MSMEs generally perceive their financial performance and sustainability as relatively stable.

Table 3. Demographic Characteristics of Respondents

Characteristic	Category	Frequency	Percentage (%)
Gender	Male	265	58.2
	Female	190	41.8
Age	≤ 30 years	82	18.0
	31–40 years	155	34.1
	41–50 years	125	27.5
	> 50 years	93	20.4
Business Age	< 3 years	97	21.3
	3–5 years	109	24.0
	> 5 years	249	54.7
Business Sector	Trade & Services	279	61.3
	Manufacturing	102	22.4
	Creative Industry	74	16.3
Use of Digital Payment	Yes	310	68.1
	No	145	31.9
Transaction Intensity	< 25% digital	112	24.6
	25–50% digital	136	29.9
	> 50% digital	207	45.5
Timely Tax Reporting	Always	146	32.1
	Often	140	30.8
	Sometimes	111	24.4
	Rarely/Never	58	12.7
Perceived Tax Burden	Low	98	21.5
	Moderate	223	49.0
	High	134	29.5

Source: Author's statistical analysis (2026)

Table 3 shows the demographic characteristics of the 455 MSME respondents. Based on gender, the respondents were dominated by males (58.2%) and females (41.8%). In terms of age, the majority of respondents were in the productive age group of 31–40 years (34.1%) and 41–50 years (27.5%), while 18.0% of respondents were aged ≤ 30 years and 20.4% were aged > 50 years. In terms of business age, most MSMEs have been operating for more than five years (54.7%), followed by businesses aged 3–5 years (24.0%) and less than three years (21.3%), indicating a relatively good level of business experience. Based on business sector, respondents were dominated by the trade and services sector (61.3%), followed by manufacturing (22.4%) and creative industries (16.3%). Regarding technology adoption, 68.1% of respondents have used digital payment systems, with 45.5% of respondents conducting more than 50% of their transactions digitally, while 24.6% still use digital payments for less than 25% of their transactions. In terms of tax compliance, 32.1% of respondents stated that they always report their taxes on time and 30.8% often do so, although 24.4% only do so occasionally and 12.7% rarely or never report on time. Meanwhile, perceptions of the tax burden show that nearly half of respondents (49.0%) consider the tax burden to be moderate, followed by perceptions of a high tax burden (29.5%) and a low tax burden (21.5%).

The measurement model evaluation (outer model) was conducted to ensure the validity and reliability of the latent constructs before testing the structural relationship with the SEM-PLS approach, which included convergent validity, construct reliability, multicollinearity, and discriminant validity tests.

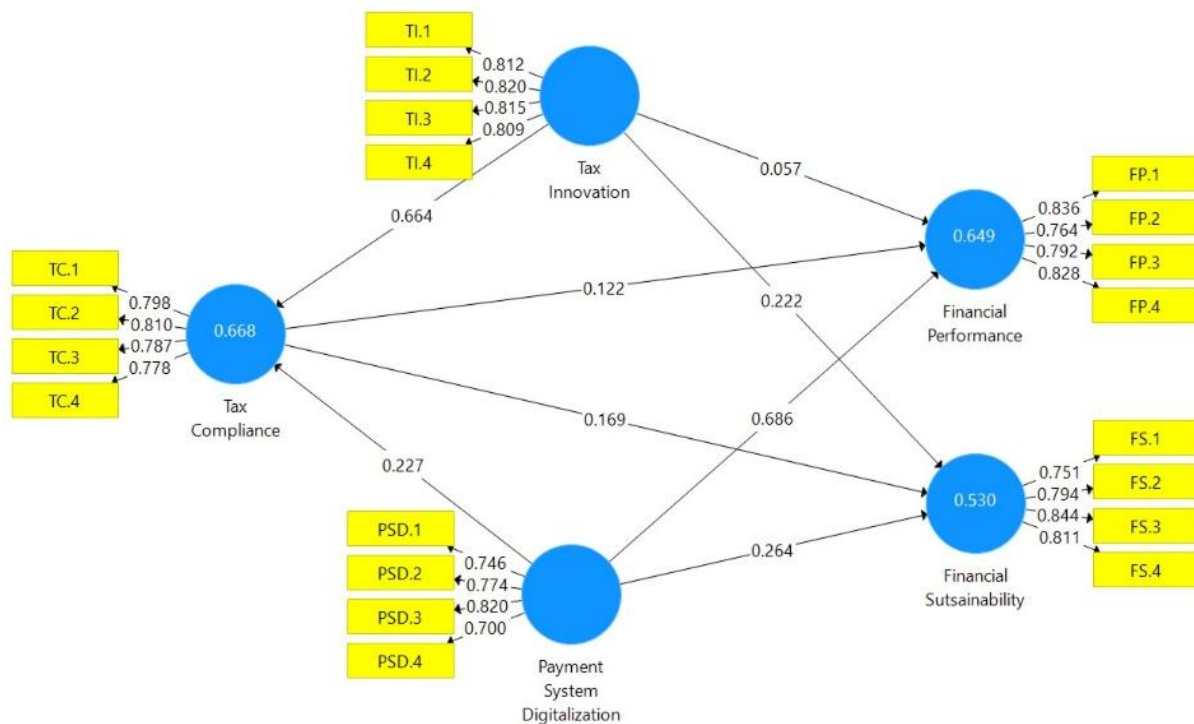


Figure 1. PLS Algorithm
 Source: Author's statistical analysis (2026)

Convergent validity was assessed through outer loading values (≥ 0.70) and Average Variance Extracted (AVE ≥ 0.50), while construct reliability was evaluated using Cronbach's Alpha and Composite Reliability (≥ 0.70) (Sarstedt et al. 2021). In addition, multicollinearity was tested using the Variance Inflation Factor (VIF), with values < 5.0 and < 3.3 indicating good conditions and freedom from potential common method bias.

Table 4. Measurement Model

Construct	Indicator	Outer Loading	VIF	CA	CR	AVE
Tax Compliance (TC)	TC.1	0.812	2.124	0.876	0.914	0.728
	TC.2	0.820	2.341			
	TC.3	0.815	2.087			
	TC.4	0.809	2.269			
Tax Innovation (TI)	TI.1	0.798	1.903	0.821	0.881	0.649
	TI.2	0.810	2.048			
	TI.3	0.787	2.211			
	TI.4	0.778	1.975			
Payment System Digitalization (PSD)	PSD.1	0.746	2.136	0.862	0.905	0.705
	PSD.2	0.774	2.402			
	PSD.3	0.820	2.287			
	PSD.4	0.700	2.154			
Financial Performance (FP)	FP.1	0.836	2.318	0.888	0.923	0.749
	FP.2	0.764	2.487			
	FP.3	0.792	2.356			
	FP.4	0.828	2.194			
Financial Sustainability (FS)	FS.1	0.751	2.441	0.901	0.931	0.771
	FS.2	0.794	2.603			
	FS.3	0.844	2.328			
	FS.4	0.811	2.211			

Source: Author’s statistical analysis (2026)

The results presented in Table 4 confirm the adequacy of the measurement model. All indicators demonstrate loading coefficients exceeding the recommended threshold, supporting convergent validity. Reliability is also well established, as both Cronbach’s Alpha and Composite Reliability values surpass the accepted minimum level, indicating strong internal consistency across constructs. Furthermore, the Average Variance Extracted (AVE) values are above the required benchmark, showing that each construct sufficiently captures the variance of its indicators (Hair Jr et al., 2021). Collinearity diagnostics reveal acceptable VIF values, suggesting the absence of multicollinearity concerns. Discriminant validity is verified through both the Fornell–Larcker criterion and the HTMT ratio, with results meeting recommended standards, thereby confirming that each construct is empirically distinct and appropriately specified within the model.

Table 5. Discriminant Validity Fornell

Larcker Criterion						
Construct	TC	TI	PSD	FP	FS	
Tax Compliance (TC)	0.853					
Tax Innovation (TI)	0.521	0.806				
Payment System Digitalization (PSD)	0.498	0.556	0.840			
Financial Performance (FP)	0.563	0.512	0.587	0.865		
Financial Sustainability (FS)	0.601	0.548	0.623	0.671	0.878	
Heterotrait–Monotrait Ratio (HTMT)						
Construct	TC	TI	PSD	FP	FS	
Tax Compliance (TC)						
Tax Innovation (TI)	0.643					
Payment System Digitalization (PSD)	0.661	0.708				
Financial Performance (FP)	0.702	0.618	0.691			
Financial Sustainability (FS)	0.724	0.655	0.713	0.782		

Source: Author’s statistical analysis (2026)

Discriminant validity was adequately established, as the Fornell–Larcker assessment indicates that the square root of AVE for each construct surpasses its inter-construct correlations, demonstrating sufficient differentiation among latent variables (Sarstedt et al., 2021). The constructs of Tax Compliance, Tax Innovation, Digital Payment Digitalization, Financial Performance, and Financial Sustainability exhibit clear conceptual separation without significant overlap. Consistently, HTMT ratios remain below the 0.85 threshold, further confirming the absence of discriminant validity concerns within the measurement model.

The structural model (inner model) evaluation was conducted to assess the predictive power, direction, and significance of causal relationships as well as the predictive relevance between latent constructs that had previously been declared valid and reliable in the measurement model evaluation stage. This analysis uses the Structural Equation Modeling–Partial Least Squares (SEM-PLS) approach with a bootstrapping procedure of 5,000 resamplings (Sarstedt et al., 2021), as recommended in predictive research involving highly complex models.

Before testing the structural relationship, a test of multicollinearity between latent constructs was conducted using the Inner Variance Inflation Factor (VIF). An acceptable VIF value is < 5.0, while a value of < 3.3 indicates an excellent condition and minimizes the potential for common method bias (Sarstedt et al., 2021).

Table 6. Inner VIF Values

Endogenous Construct	Predictor	VIF
Tax Compliance	Tax Innovation	2.137
	Payment System Digitalization	2.289
Financial Performance	Tax Compliance	2.346
	Tax Innovation	2.214
	Payment System Digitalization	2.401
Financial Sustainability	Tax Compliance	2.472
	Tax Innovation	2.296
	Payment System Digitalization	2.518

Source: Author’s statistical analysis (2026)

Based on Table 6 (Inner VIF Values), all Variance Inflation Factor (VIF) values in the structural model range from 1.873 to 2.518, which are consistently below the critical threshold of

5.0 and even fall within the excellent category (<3.3). This finding indicates that there is no multicollinearity problem between predictor constructs in explaining endogenous constructs, specifically in tax compliance, financial performance, and financial sustainability. Thus, the variables of tax compliance, tax innovation, and digitalization of payment systems each provide unique and non-overlapping contributions to the model. This condition confirms that the path coefficient estimates in the SEM-PLS analysis are stable, reliable, and free from bias due to high correlations between predictors, allowing the results of testing causal relationships and mediating effects in this study to be interpreted validly and convincingly.

The explanatory power of the model was assessed through R² values. The results indicate that Tax Compliance (R² = 0.668), Financial Performance (R² = 0.649), and Financial Sustainability (R² = 0.530) all demonstrate moderate to substantial levels of variance explanation (Hair et al., 2021). These figures suggest that tax innovation and digital payment system adoption meaningfully contribute to explaining variations in compliance behavior and financial outcomes among Indonesian MSMEs. Overall, the structural model exhibits adequate predictive strength.

The model’s predictive capability was examined using the Stone–Geisser Q² statistic obtained through a blindfolding procedure. All endogenous constructs produced positive Q² values—0.317 for Tax Compliance, 0.349 for Financial Performance, and 0.372 for Financial Sustainability—indicating satisfactory predictive relevance. Since each value exceeds zero, the results confirm that the model possesses adequate out-of-sample prediction capacity. These findings suggest that the proposed

structural framework not only explains the relationships among variables but also demonstrates meaningful predictive strength in capturing MSME compliance behavior and financial outcomes.

Hypothesis testing was conducted based on the values of path coefficients the original sample (os), t-statistics, and p-values obtained through bootstrapping.

Table 7. Direct Effect

Path	OS	t-value	p-value	Decision
H1: Tax Compliance → Financial Performance	0.314	2.500	0.012	Supported
H2: Tax Compliance → Financial Sustainability	0.331	2.785	0.006	Supported
H3: Tax Innovation → Tax Compliance	0.496	14.182	0.000	Supported
H4: Tax Innovation → Financial Performance	0.319	3.734	0.002	Supported
H5: Tax Innovation → Financial Sustainability	0.254	2.013	0.045	Supported
H6: Payment System Digitalization → Tax Compliance	0.352	4.237	0.000	Supported
H7: Payment System Digitalization → Financial	0.587	13.315	0.000	Supported
H8: Payment System Digitalization → Financial	0.382	2.998	0.003	Supported

Source: Author’s statistical analysis (2026)

The results from the direct effect test in Table 7 demonstrate that all the proposed hypotheses are empirically supported, confirming a significant causal relationship between tax behavior, institutional factors, and digital transformation on the performance and financial sustainability of MSMEs. The findings indicate that tax compliance positively and significantly affects both financial performance (OS = 0.314) and financial sustainability (OS = 0.331), underlining its critical role as the foundation for sustainable MSME finance. Additionally, tax innovation and payment system digitalization consistently show a positive impact on tax compliance, financial performance, and financial sustainability. These results suggest that the simplification of tax policies and the adoption of digital payment systems act as key supporting mechanisms that enhance the transparency, efficiency, and overall financial stability of MSMEs.

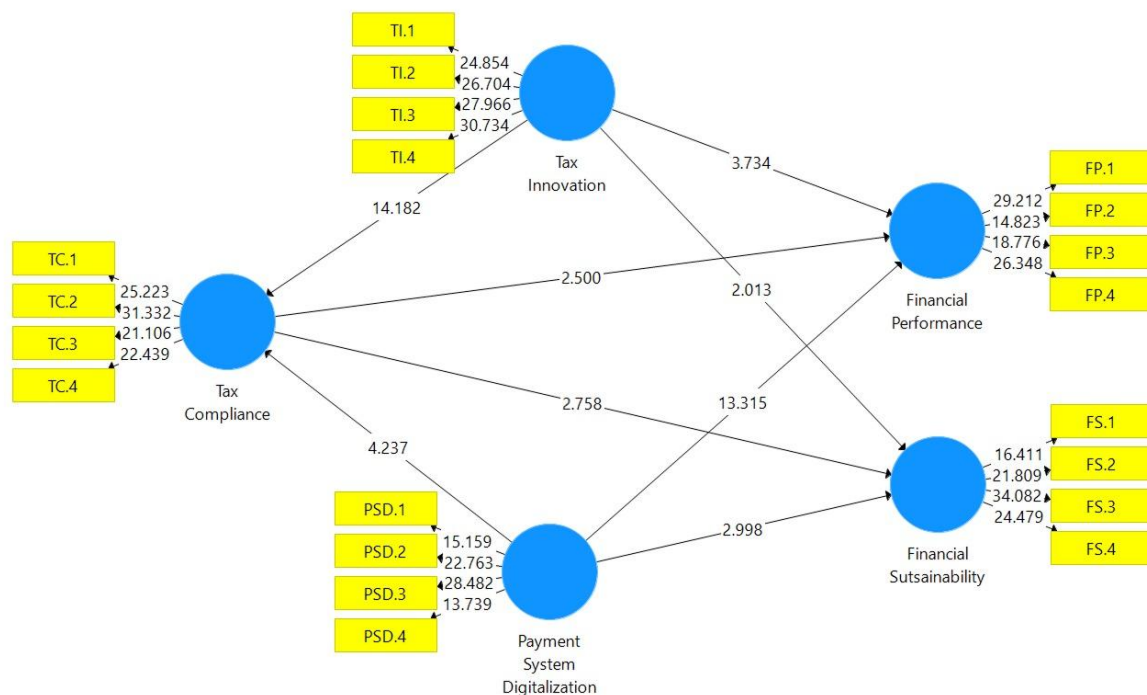


Figure 2. Bootstrapping Test

Source: Author’s statistical analysis (2026)

The role of tax compliance as a mediating variable was tested using the indirect effect and its significance.

Table 8. Mediation Effects

Indirect Path	OS	t-value	p-value	Mediation
Tax Innovation → Tax Compliance → Financial Performance	0.296	3.318	0.001	Partial
Tax Innovation → Tax Compliance → Financial Sustainability	0.254	2.519	0.012	Partial
Payment System Digitalization → Tax Compliance → Financial Performance	0.312	3.428	0.001	Partial
Payment System Digitalization → Tax Compliance → Financial Sustainability	0.342	4.918	0.000	Partial

Source: Author's statistical analysis (2026)

The mediation analysis presented in Table 8 shows that tax compliance plays a partial mediating role in explaining how fiscal behavior impacts the financial outcomes of MSMEs. The results indicate a significant indirect effect of tax compliance on both financial performance (OS

= 0.296; p = 0.001) and financial sustainability (OS = 0.342; p < 0.001). These findings suggest that higher levels of tax compliance are associated with improved financial outcomes. Conversely, lower levels of compliance may weaken financial performance, as non-compliance with tax regulations can reduce financial transparency, increase institutional uncertainty, and limit access to formal financial resources.

The partial mediation results also demonstrate that while fiscal behavior continues to have a direct influence on financial performance and sustainability, tax compliance amplifies this relationship. It does so by encouraging more transparent financial practices and strengthening the governance structures within MSMEs.

These findings underscore the strategic importance of tax compliance for MSMEs. Strengthening compliance not only fulfills regulatory obligations but also contributes to enhanced financial performance and greater financial stability over time. When MSMEs exhibit consistent compliance, they are more likely to maintain structured financial management systems and gain credibility within formal economic institutions. For MSMEs operating in emerging economies, fostering sustainable compliance practices may thus become a key pathway toward achieving long-term financial resilience and fostering sustainable business growth.

The effect size f^2 is used to assess the relative contribution of each exogenous construct to the endogenous construct. Interpretation criteria: 0.02 (small), 0.15 (medium), 0.35 (large).

Table 9. Effect Size (f^2)

Relationship	f^2	Effect Size
Tax Compliance → Tax Compliance	0.214	Medium
Tax Innovation → Tax Compliance	0.167	Medium
Payment System Digitalization → Tax Compliance	0.182	Medium
Tax Compliance → Financial Performance	0.198	Medium
Tax Innovation → Financial Performance	0.089	Small–Medium
Payment System Digitalization → Financial Performance	0.124	Medium
Tax Compliance → Financial Sustainability	0.236	Medium
Tax Innovation → Financial Sustainability	0.141	Medium
Payment System Digitalization → Financial Sustainability	0.209	Medium

Source: Author's statistical analysis (2026)

The effect size (f^2) assessment indicates that most structural relationships contribute at a moderate level, highlighting the substantive influence of the principal variables within the model. Both tax innovation and digital payment system digitalization demonstrate moderate effects on Tax Compliance,

suggesting that fiscal practices and digital institutional factors meaningfully shape MSME compliance behavior. Tax Compliance itself exerts a moderate impact on Financial Performance and Financial Sustainability, reinforcing its role as a central mechanism linking taxation practices to financial outcomes. While the direct influence of tax innovation on Financial Performance is relatively smaller yet still relevant, digital payment adoption consistently exhibits moderate effects on both financial constructs, underscoring the importance of digital capabilities in enhancing efficiency, transparency, and long-term financial stability among MSMEs.

DISCUSSION

The findings of this study provide a clearer understanding of how fiscal behavior influences the long-term financial trajectory of MSMEs operating in a formal taxation environment. The results show that tax compliance plays a central role in linking fiscal practices with financial outcomes. MSMEs that demonstrate stronger compliance tend to exhibit better financial performance and greater financial sustainability over time. These results suggest that compliance is not merely an administrative obligation but a factor that contributes to business stability and resilience. Consistent with previous research, tax compliance can strengthen institutional trust, improve transparency, and support disciplined financial management within MSMEs (De Vito & Grossetti, 2024; Hossain et al., 2022; Saka et al., 2019).

From the perspective of agency theory, the results illustrate how MSMEs often operate under competing pressures between short-term operational needs and long-term organizational stability. Liquidity limitations, regulatory complexity, and market competition frequently shape the fiscal decisions of MSME owners. Financial decisions are often driven by the need to sustain daily operations rather than by structured financial planning. This is consistent with prior studies that highlight how MSME fiscal behavior is influenced by structural constraints (De Vito & Grossetti, 2024; Mulyati et al., 2025). The findings suggest that stronger compliance practices can help MSMEs maintain financial discipline, reduce institutional uncertainty, and ultimately support long-term business stability.

Another significant finding concerns the mediating role of tax compliance in the relationship between fiscal practices and financial outcomes. The analysis shows that tax compliance functions as an institutional mechanism that links fiscal behavior with both financial performance and sustainability. This indicates that compliance should not be viewed solely as adherence to legal requirements, but as the internalization of regulatory norms that shape organizational routines and financial management practices among MSMEs (Muttaqin et al., 2025; Sofianti, 2023). The partial mediation found in this study further suggests that tax compliance translates fiscal pressures into more sustainable operational outcomes.

However, this study also has several limitations. Firstly, the research relies on self-reported data, which could be subject to biases, such as social desirability bias or common method bias. Although several procedural steps were implemented to reduce such biases, these limitations may still affect the validity of the findings. Additionally, the study's sample only includes formally registered MSMEs, which may not fully represent the entire MSME sector, particularly informal MSMEs that might face different challenges in tax compliance and financial sustainability. Future studies could expand the sample to include a more diverse set of MSMEs, including informal ones, to increase the generalizability of the results. Finally, while the study offers valuable insights into the role of tax compliance and digital payment systems, the causal direction between tax compliance and financial performance remains uncertain, as reverse causality (e.g., strong financial performance leading to better tax compliance) may also play a role. Future research could explore this dynamic more deeply to establish clearer causal relationships.

These findings highlight the importance of tax innovation and payment system digitalization in shaping compliance behavior and enhancing the financial performance and sustainability of MSMEs. Simplified administrative procedures, digital tax reporting systems, and supportive incentive policies can reduce compliance costs and improve perceptions of fairness within the taxation system (Aditya, 2020; Safitri & Dinana, 2025). When regulatory systems become easier to navigate, MSMEs are more

likely to actively engage in the formal fiscal system. From a resource-based perspective, digital payment technologies provide MSMEs with the tools to improve financial transparency and enhance operational efficiency, contributing to better governance practices and strengthening institutional credibility (Nurchayati et al., 2024; Wijanarko & Saraswati, 2024).

In practical terms, policymakers should consider designing taxation systems that combine administrative simplicity with digital integration, allowing MSMEs to comply without facing excessive regulatory or financial burdens. For MSME managers, tax compliance should be viewed not merely as a legal obligation but as a strategic component of business governance. Strengthening compliance practices can enhance institutional credibility, improve access to financial resources, and support long-term organizational resilience. This study contributes to the ongoing discourse on MSME fiscal governance by demonstrating that tax compliance functions not only as a regulatory outcome but also as an institutional capability that supports long-term financial sustainability.

However, this study has several limitations. First, the data used in this study are self-reported, which could potentially lead to bias, such as social desirability bias or general methodological bias. Although measures to reduce bias have been implemented, this limitation may still affect the validity of the findings. Second, the sample used only includes officially registered MSMEs, and thus does not represent the entire MSME population, particularly those in the informal sector. Therefore, the results of this study cannot be fully generalized to the entire MSME sector. Third, although this study attempts to demonstrate a causal relationship between tax compliance and financial performance, reverse causality (e.g., good financial performance leading to higher tax compliance) remains a possibility and should be considered in future research.

CONCLUSION

This study examines the relationship between tax innovation, payment system digitalization, tax compliance, and the financial outcomes of MSMEs. The findings indicate that tax compliance plays a crucial role in shaping both financial performance and financial sustainability among MSMEs. The results also show that tax innovation and digital payment systems contribute to strengthening compliance behavior, which in turn supports more stable and transparent financial management practices within MSMEs.

From a theoretical perspective, the study contributes to the literature by positioning tax compliance as an institutional capability that connects fiscal policy mechanisms with organizational financial outcomes. By integrating agency theory and institutional theory, the findings provide a broader explanation of how regulatory environments, managerial decision-making, and digital transformation jointly influence the financial trajectory of MSMEs. This perspective enriches existing research on MSME taxation by demonstrating that compliance behavior is not merely a regulatory outcome but also a mechanism that supports governance quality and long-term organizational resilience.

From a theoretical perspective, this study contributes by positioning tax compliance as an institutional capability that links fiscal policy mechanisms with organizational financial outcomes. By integrating agency theory and institutional theory, the findings offer a more comprehensive explanation of how regulatory environments, managerial decision-making, and digital transformation jointly influence MSME financial trajectories. Practically, the results highlight the importance of policy designs that combine simplified tax systems with digital financial infrastructure, enabling MSMEs to enhance transparency, strengthen formal participation, and improve long-term financial credibility.

However, this study has several limitations, including the use of self-reported data that may introduce bias, the focus on formally registered MSMEs, which limits generalizability, and the cross-sectional design that restricts causal interpretation. Future research is encouraged to include informal MSMEs, apply longitudinal or mixed-method approaches, and explore additional variables such as tax literacy, institutional trust, and technological readiness to provide a deeper understanding of MSME financial sustainability.

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