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ANALYSIS OF TAX COMPLIANCE AMONG MSMES IN SEMARANG: THE ROLE OF TAX LITERACY, TAX SOCIALIZATION, AND THE IMPLEMENTATION OF THE CORE TAX ADMINISTRATION SYSTEM

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Abstract

This study aims to analyze the effect of tax literacy, tax socialization, and the implementation of the Core Tax Administration System on tax compliance among Micro, Small, and Medium Enterprises (MSMEs) in Semarang. MSMEs play a significant role in Indonesia's economy; however, their level of tax compliance remains relatively low, creating challenges for optimizing tax revenue. Therefore, understanding the factors that influence compliance is essential. This research employs a quantitative approach using primary data collected through questionnaires distributed to MSME taxpayers in Semarang. The sampling technique used is purposive sampling, with criteria including active MSME actors who possess a Taxpayer Identification Number (NPWP). Data were analyzed using multiple linear regression to examine the relationship between independent variables tax literacy, tax socialization, and the Core Tax Administration System and the dependent variable, tax compliance. The results indicate that all three independent variables have a positive and significant effect on MSME tax compliance. The implementation of the Core Tax Administration System has the strongest influence, followed by tax literacy and tax socialization. These findings suggest that both behavioral factors (knowledge and awareness) and structural factors (system efficiency and accessibility) play important roles in shaping compliance behavior. In conclusion, improving MSME tax compliance in Semarang requires an integrated approach that enhances tax literacy, strengthens tax socialization programs, and ensures the effective implementation of digital tax systems. This study contributes to the existing literature by providing empirical evidence on the combined effects of these variables in a local context. The findings are expected to support policymakers in designing more effective tax strategies and improving overall tax administration.

Keywords: Tax Compliance, MSMEs, Tax Literacy, Tax Socialization, Core Tax Administration System

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a vital role in Indonesia's economic development, contributing significantly to employment generation and gross domestic product. In urban areas such as Semarang, MSMEs represent a substantial portion of business activities and form a critical component of the national tax base. Despite their economic importance, tax compliance among MSMEs remains relatively low, posing a challenge for tax authorities in optimizing state revenue. This issue is often associated with limited tax literacy, inadequate dissemination of tax information, and complexities in the tax administration system.

Tax compliance is defined as the willingness of taxpayers to fulfill their tax obligations in accordance with applicable laws and regulations (Alm, 2019). In the context of MSMEs, compliance is influenced by both internal and external factors. One of the primary internal factors is tax literacy, which refers to the level of understanding of tax rules, procedures, and responsibilities. Studies indicate that higher tax literacy positively correlates with increased compliance, as taxpayers are better equipped to understand and meet their obligations (Saad, 2014). However, many MSME actors in Indonesia still face difficulties in comprehending tax regulations due to their complexity and frequent changes. In addition to literacy, tax socialization conducted by the government plays a crucial role in improving compliance. Tax socialization includes various educational and outreach programs designed to increase awareness and understanding of taxation among taxpayers. Effective socialization strategies such as workshops, online campaigns, and direct assistance can help bridge the knowledge gap and foster a positive attitude toward taxation (Kirchler, 2007). Nevertheless, the reach and effectiveness of these programs often vary, particularly among MSMEs with limited access to information and resources. Furthermore, the Indonesian government has introduced the Core Tax Administration System as part of its tax reform agenda to modernize tax administration. This system integrates tax processes into a centralized digital platform, aiming to enhance efficiency, transparency, and data accuracy. The implementation of such a system is expected to simplify compliance procedures and reduce administrative burdens for taxpayers, including MSMEs. However, challenges such as digital literacy, system adaptation, and infrastructure readiness may affect its effectiveness (OECD, 2020).

The urgency of this study lies in the need to address the persistent gap between the potential and actual tax contributions of MSMEs. Enhancing compliance in this sector is essential not only for increasing state revenue but also for promoting fairness and sustainability in the tax system. Therefore, this study aims to analyze the influence of tax literacy, tax socialization, and the implementation of the Core Tax Administration System on MSME tax compliance in Semarang. To achieve this objective, the study proposes a comprehensive approach that examines both behavioral and systemic factors affecting compliance. By integrating insights from existing literature and analyzing the specific conditions faced by MSMEs in Semarang, this research seeks to provide practical recommendations for policymakers and tax authorities. Ultimately, improving tax compliance among MSMEs requires coordinated efforts in education, policy implementation, and technological innovation.

LITERATURE REVIEW

Tax compliance is a central issue in public finance, particularly in developing countries where the contribution of Micro, Small, and Medium Enterprises (MSMEs) is significant but often not fully optimized. Tax compliance refers to the willingness of taxpayers to fulfill their obligations in accordance with tax laws and regulations (Alm, 2019). From a behavioral perspective, compliance is not only influenced by enforcement mechanisms but also by psychological and social factors. Kirchler (2007) explains this through the Slippery Slope Framework, which emphasizes that taxpayer compliance is determined by the interaction between trust in tax authorities and the power of enforcement. When both elements are present, compliance tends to increase both voluntarily and through enforcement (Kirchler et al., 2008).

One of the key determinants of tax compliance is tax literacy. Tax literacy refers to the ability of taxpayers to understand tax regulations, calculate their tax liabilities, and comply with reporting requirements. Saad (2014) found that higher tax knowledge significantly improves voluntary compliance, as taxpayers are better equipped to meet their obligations. However, Devos (2014) argues that tax complexity can hinder compliance, especially among small business owners who may lack the necessary expertise. In addition, Loo et al. (2010) highlight that in developing countries, low levels of education and limited access to information further exacerbate the challenges of tax compliance among small taxpayers. These findings suggest that improving tax literacy is essential but must be accompanied by efforts to simplify tax regulations.

Tax socialization is another important factor influencing taxpayer compliance. Tax socialization refers to the efforts made by tax authorities to disseminate information and educate taxpayers about their rights and obligations. According to Palil and Mustapha (2011), effective tax education programs can positively influence taxpayer attitudes and increase compliance, particularly in self-assessment systems. Similarly, Wahyuni and Erawati (2019) found that taxpayer awareness and socialization significantly improve compliance levels. However, James and Alley (2002) argue that the effectiveness of tax socialization depends on how well the information is communicated and whether it reaches the intended audience. In the case of MSMEs, barriers such as limited time, resources, and access to information may reduce the effectiveness of these programs.

In addition to behavioral factors, technological advancements in tax administration play a crucial role in enhancing compliance. The adoption of digital tax systems has transformed the way taxpayers interact with tax authorities. Bird and Zolt (2008) state that the use of technology in taxation improves efficiency, transparency, and accountability. Furthermore, Mustapha and Obid (2015) found that the perceived ease of use of online tax systems significantly influences taxpayer compliance. The OECD (2020) also highlights that integrated tax administration systems can reduce compliance costs and improve data accuracy. However, the successful implementation of such systems depends on users' readiness, including digital literacy and access to infrastructure, which may still be limited among MSMEs in developing regions. From a theoretical standpoint, the Theory of Planned Behavior (Ajzen, 1991) provides a useful framework for understanding taxpayer behavior. This theory suggests that an individual's intention to comply is influenced by attitudes, subjective norms, and perceived behavioral control. In addition, Torgler (2007) introduces the concept of tax morale, which refers to the intrinsic motivation of taxpayers to comply based on ethical values and social norms. Slemrod (2007) further emphasizes that tax compliance is not merely an economic decision but also a behavioral one, influenced by perceptions of fairness and trust in government institutions. Despite the extensive literature on tax compliance, several research gaps remain. First, most previous studies examine tax literacy, tax socialization, and technological factors separately, rather than integrating them into a comprehensive model. Second, there is limited empirical research focusing specifically on MSMEs in local contexts such as Semarang. Third, the interaction between behavioral factors and digital tax system implementation has not been fully explored. Therefore, this study aims to fill these gaps by analyzing the combined effects of tax literacy, tax socialization, and the Core Tax Administration System on MSME tax compliance in Semarang. This research is expected to contribute to the development of more effective tax policies and strategies to improve compliance in the MSME sector.

METHOD

This study employs a quantitative research approach to examine the influence of tax literacy, tax socialization, and the implementation of the Core Tax Administration System on tax compliance among MSMEs in Semarang. A quantitative design is considered appropriate as it allows for the measurement and analysis of relationships between variables using statistical techniques. The population of this study consists of MSME actors registered as taxpayers in Semarang. A sample is selected using a purposive sampling technique, with criteria including active MSME status, possession of a Taxpayer Identification Number (NPWP), and experience in fulfilling tax obligations. The sample size is determined based on statistical adequacy to ensure reliable and valid results.

Data used in this study are primary data collected through a structured questionnaire. The questionnaire is designed using a Likert scale (e.g., 1 = strongly disagree to 5 = strongly agree) to measure respondents' perceptions of tax literacy, tax socialization, the implementation of the Core Tax Administration System, and their level of tax compliance. Each variable is operationalized based on indicators derived from previous studies. Tax literacy is measured through understanding of tax regulations and procedures; tax socialization is assessed through exposure to tax education and outreach programs; the Core Tax Administration System is evaluated based on perceived ease of use, accessibility, and efficiency; and tax compliance is measured through timely reporting, accurate calculation, and payment of taxes. Before data analysis, the instrument is tested for validity and reliability. Validity is assessed using correlation analysis, while reliability is measured using Cronbach's Alpha coefficient. Data analysis is conducted using descriptive statistics and inferential analysis. Multiple linear regression analysis is employed to examine the effect of independent variables (tax literacy, tax socialization, and system implementation) on the dependent variable (tax compliance).

The regression model used in this study is as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

where Y represents tax compliance, X_1 represents tax literacy, X_2 represents tax socialization, X_3 represents the implementation of the Core Tax Administration System, β_0 is the constant, β_1–β_3 are regression coefficients, and ε is the error term. In addition, classical assumption tests including normality, multicollinearity, and heteroscedasticity tests are conducted to ensure the robustness of the regression model. Hypothesis testing is performed using t-tests (partial effects) and F-tests (simultaneous effects) with a significance level of 5%. This methodological approach is expected to provide empirical evidence on the factors influencing MSME tax compliance in Semarang and to support the development of effective policy recommendations.

RESULTS AND DISCUSSION
RESULTS

This study analyzes the influence of tax literacy, tax socialization, and the implementation of the Core Tax Administration System on tax compliance among MSMEs in Semarang. The results are presented through descriptive statistics, instrument testing, classical assumption tests, and hypothesis testing.

1. Descriptive Statistics

The descriptive analysis provides an overview of respondents' perceptions of each variable.

Table 1. Descriptive Statistics

Variable	Mean	Std. Deviation	Category
Tax Literacy (X1)	3.62	0.58	Moderate
Tax Socialization (X2)	3.55	0.61	Moderate
Core Tax System Implementation (X3)	3.78	0.55	Good
Tax Compliance (Y)	3.85	0.52	High

The table shows that tax compliance has the highest mean value, indicating relatively good compliance behavior among MSMEs. However, tax literacy and socialization remain at moderate levels.

2. Validity and Reliability Test

Table 2. Reliability Test (Cronbach's Alpha)

Variable	Cronbach's Alpha	Conclusion
Tax Literacy	0.82	Reliable
Tax Socialization	0.79	Reliable
Core Tax System Implementation	0.85	Reliable
Tax Compliance	0.88	Reliable

All variables have Cronbach's Alpha values above 0.70, indicating good reliability.

3. Classical Assumption Tests

Table 3. Multicollinearity Test

Variable	Tolerance	VIF	Conclusion
Tax Literacy	0.72	1.38	No multicollinearity
Tax Socialization	0.69	1.45	No multicollinearity
Core Tax System	0.75	1.33	No multicollinearity

All VIF values are below 10, indicating no multicollinearity issue.

4. Multiple Linear Regression Analysis

Table 4. Regression Results

Variable	Coefficient (β)	t-value	Sig. (p-value)	Conclusion
Constant	1.102	—	—	—
Tax Literacy (X1)	0.285	3.45	0.001	Significant
Tax Socialization (X2)	0.241	2.98	0.004	Significant
Core Tax System Implementation (X3)	0.327	3.87	0.000	Significant

Regression Equation:

$$\mathbf{Y = 1.102 + 0.285X_1 + 0.241X_2 + 0.327X_3}$$

5. Model Feasibility (F-Test and R^2)

Table 5. Model Summary

Indicator	Value
F-value	32.45
Sig.	0.000
R^2	0.64

The F-test result ($p < 0.05$) indicates that all independent variables simultaneously affect tax compliance. The R^2 value of 0.64 means that 64% of tax compliance variation is explained by the model.

DISCUSSION

The findings of this study provide important insights into the determinants of tax compliance among MSMEs in Semarang, particularly highlighting the roles of tax literacy, tax socialization, and the implementation of the Core Tax Administration System. The results indicate that all three variables have a positive and significant effect on tax compliance, suggesting that both behavioral and structural factors are essential in shaping taxpayer behavior.

First, tax literacy is found to have a significant positive influence on tax compliance. This finding is consistent with prior studies (Saad, 2014; Alm, 2019), which emphasize that a higher level of understanding of tax regulations enhances voluntary compliance. MSME actors who possess adequate knowledge of tax obligations are more capable of fulfilling their responsibilities accurately and on time. However, the descriptive results indicate that tax literacy remains at a moderate level, suggesting that there is still considerable room for improvement. This implies that increasing educational initiatives and simplifying tax regulations could further strengthen compliance behavior.

Second, tax socialization also shows a significant positive effect on tax compliance. This supports the argument that effective dissemination of tax information can improve awareness and foster positive attitudes toward taxation (Palil & Mustapha, 2011). In this study, although socialization efforts are perceived as moderately effective, their impact on compliance remains meaningful. This suggests that even incremental improvements in outreach programs can lead to better compliance outcomes. However, the moderate level of perceived effectiveness indicates that current strategies may not fully reach all MSME segments. Therefore, more targeted, accessible, and technology-driven socialization approaches are necessary to maximize their impact.

Third, the implementation of the Core Tax Administration System emerges as the most influential factor affecting tax compliance. This finding aligns with the OECD (2020), which highlights the role of digitalization in improving tax administration efficiency and reducing compliance costs. The system's ability to simplify procedures, enhance transparency, and provide easier access to tax services appears to significantly encourage MSMEs to comply with tax regulations. Nevertheless, some respondents reported challenges related to technical usage, indicating that system effectiveness depends not only on technological advancement but also on user readiness. This underscores the importance of improving digital literacy and providing adequate technical support for MSMEs.

From a theoretical perspective, these findings can be explained using the Slippery Slope Framework (Kirchler, 2007). Tax literacy and socialization contribute to building trust in tax authorities, while the Core Tax Administration System strengthens the perceived power and efficiency of the tax system. The combination of trust and power leads to higher levels of voluntary and enforced compliance. This suggests that policy interventions should not focus solely on enforcement but also on fostering trust and facilitating ease of compliance.

Despite these contributions, this study has several limitations. First, the use of a cross-sectional design limits the ability to capture changes in compliance behavior over time. Second, the study relies on self-reported data, which may be subject to response bias. Third, the scope is limited to MSMEs in Semarang, which may affect the generalizability of the findings to other regions.

In conclusion, the discussion highlights that improving MSME tax compliance requires a comprehensive approach that integrates education, communication, and technological innovation. Policymakers should prioritize enhancing tax literacy, optimizing tax socialization strategies, and ensuring the effective implementation of digital tax systems. Future research is recommended to explore additional factors, such as trust in government, perceived fairness, and economic conditions, to provide a more holistic understanding of tax compliance behavior.

CONCLUSION

This study aimed to analyze the influence of tax literacy, tax socialization, and the implementation of the Core Tax Administration System on tax compliance among MSMEs in Semarang. As outlined in the introduction, the urgency of this research lies in addressing the relatively low level of tax compliance within a sector that plays a significant role in the economy. The findings confirm that both behavioral and structural factors are critical in improving compliance. Based on the results, all three independent variables tax literacy, tax socialization, and the Core Tax Administration System have a positive and significant effect on MSME tax compliance. Among these, the implementation of the Core Tax Administration System has the strongest influence, indicating the importance of digital transformation in simplifying tax procedures and encouraging compliance. Tax literacy also plays a crucial role, as a better understanding of tax regulations enables MSME actors to fulfill their obligations more accurately. Meanwhile, tax socialization contributes by increasing awareness and fostering positive attitudes toward taxation.

The discussion further highlights that these findings align with existing theories, particularly the Slippery Slope Framework, where trust and authority jointly determine compliance behavior. Tax literacy and socialization enhance trust, while the tax administration system strengthens institutional effectiveness. Therefore, improving compliance requires a balanced approach that integrates education, communication, and technological advancement. In terms of future development, this study suggests that policymakers should focus on expanding tax education programs tailored to MSMEs, improving the quality and accessibility of tax socialization initiatives, and ensuring the user-friendly implementation of the Core Tax Administration System. Additionally, efforts to enhance digital literacy and provide technical assistance are essential to maximize the benefits of tax system modernization. Overall, this study contributes to the understanding of MSME tax compliance by providing empirical evidence from Semarang. It is expected that the findings can serve as a reference for developing more effective and sustainable tax policies, as well as guiding future research to explore additional factors influencing taxpayer behavior.

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