

**The Analysis of Factors Affecting Tax Compliance Among MSMEs In
Batam City**

Shelvira¹, Mortigor Afrizal Purba²

^{1,2} Universitas Putera Batam

pb200810048@upbatam.ac.id, mortigor@puterabatam.ac.id

ABSTRACT

The primary objective of this study is to assess the impact of the modernization of the tax administration system, tax socialization, and tax supervision on the compliance of micro, small, and medium enterprises (MSMEs) in Batam City. This research adopts a quantitative approach and focuses on the population of MSMEs actors who submitted tax returns to KPP Pratama Batam Selatan in 2022, with total of 2.797 individuals. By applying the Slovin formula with a 10% margin of error, a sample of 100 respondents was selected for the study. The research employs secondary data obtained from books, articles and also directly obtained from KPP Pratama Batam Selatan and the collection of primary data involved distributing questionnaires using Google Forms, and the responses will be analyzed utilizing the SPSS version 25 software. The findings indicate a positive and significant connection of the modernization of the tax administration system, tax socialization, and tax supervision on the tax compliance of MSMEs in Batam City.

Keywords: *Modernization of Tax Administration System; Tax Socialization; Tax Supervision; Tax Compliance; MSMEs*

INTRODUCTION

Tax revenue is essential for funding national development and enhancing community welfare. During periods of global crisis, many nations utilize taxes as an economic tool to promote sustainable development and elevate living standards. From an economic standpoint, taxes serve a wide-ranging purpose as a policy instrument to regulate and oversee the economic activities of a nation, mitigate the adverse effects of externalities, stimulate investment, and manage income distribution. Additionally, taxes are employed to mitigate inflation, bolster consumption or savings, and sway investor choices.

Indonesia is a country who relies on tax revenue as its primary source of income. Tax plays a crucial role in funding government operations and development aimed at improving the well-being of its citizens. These initiatives encompass infrastructure development, education, healthcare, fuel subsidies, public amenities, and the remuneration of state employees (Sari, 2020). The significance of taxation is evident in the substantial proportion of tax revenues within the overall state income over the past five years.

Table 1. Tax Revenues of Indonesia in 2018 - 2022

Year	Total State Income	Total Tax Revenue	Percentage
2018	1.943.674,90	1.518.789,80	78,14%
2019	1.960.633,60	1.546.141,90	78,86%
2020	1.647.783,34	1.248.415,11	75,76%
2021	2.011.347,10	1.547.841,10	76,96%
2022	2.436.877,80	1.924.937,50	78,99%

Source: bps.go.id

From the data presented in the table, it is evident that state income underwent fluctuations over the five-year period. After reaching its highest point in 2019, state income saw a decline in 2020, followed by a notable increase in 2021 and 2022. Similarly, tax revenues displayed fluctuations, with a peak in 2019, a considerable decrease in 2020, and subsequent increases in 2021 and 2022. Despite these fluctuations, tax revenues consistently stand as the primary contributor to Indonesia's state revenue, accounting for an average of 77,74%.

The positive tax growth is undoubtedly attributed to the contribution of the MSMEs. It is commonly recognized that MSMEs play essential role in strengthening the national economy and have the capacity to reduce the unemployment rate (Murnidayanti & Putranti, 2023). The substantial role of MSMEs is evident in their significant contribution to the GDP, accounting for approximately 61.07% of the total national GDP, equivalent to IDR 8,573.89 trillion in 2021 (Palguna & Dewi, 2023). This underscores the substantial impact of MSMEs on the overall economic landscape and their integral role in driving the country's economic growth and development. With such a significant role, the Directorate General of Taxes has placed emphasis on improving the compliance level of MSMEs, which has not yet reached the desired level, and on maximizing their tax potential (Kusumadewi & Dyarini, 2022).

This undertaking can be deemed rather intricate, as it necessitates not only the active engagement of tax officials but also the initiative and consciousness of taxpayers. An individual is deemed compliant if they have fulfilled all their tax obligations, including the capacity to accurately calculate and pay taxes, as well as to submit annual tax returns punctually and in the correct manner to the relevant tax office where they are registered (Pebrina & Hidayatulloh, 2020). The following table will illustrate the tax compliance level of MSMEs in Batam City.

Table 2. Tax Compliance Level of MSME Taxpayer at KPP Pratama Batam Selatan

Year	MSMEs Paying Taxes	MSMEs Obligated To File Tax Returns	MSMEs Have Filed Tax Returns	Compliance Percentage
2018	7.314	7.273	6.028	83%
2019	7.557	7.481	5.948	80%
2020	6.303	6.250	5.725	92%
2021	4.590	4.562	4.241	93%
2022	3.090	3.067	2.797	92%

Source: KPP Pratama Batam Selatan

During the period from 2018 to 2022, the rate of compliance, which indicates the percentage of MSMEs that have submitted their tax returns as required, displayed fluctuations but consistently stayed relatively high, ranging 80% and 93%. However, it is important to note that even though this percentage is relatively high, it has not yet reached the ideal 100% compliance level. The information also indicates a decrease in the overall count of MSMEs paying taxes over the years. According to the performance report of Department of Cooperatives, Small, and Medium Enterprises of Riau Island province in 2021, it was documented that there were 75,064 MSMEs in Batam City. This presents an opportunity for the DJP to assess the tax prospects of these MSMEs.

In encouraging taxpayer compliance, there are several factors to be considered, such as modernization of the tax administration system, socialization, and supervision. In today's era of the 4.0 industrial revolution, society is gradually moving away from traditional and complex practices in favor of simplicity. One of the ways to achieve this is through the use of advanced technology (Tobing & Kusmono, 2022). In response to the demands of globalization, tax authorities are embracing information technology to streamline processes and make it more convenient for taxpayer to fulfill their tax obligations. DGT has stated that tax reform implemented through the new tax administration system aims to enhance tax policies. This will enable taxpayers to fulfill their tax responsibilities more conveniently with the objective of increasing taxpayer compliance. Additionally, the reformation aims to reduce fraud within the tax system, thereby optimizing tax revenue (Giffary, 2023). In previous studies by Hapsari and Kholis (2020), Kusumadewi and Dyarini (2022), and Safitri et al. (2023), it was discovered that modernization of the administrative system has a positive connection on the compliance of MSME taxpayers. Unlike the earlier researchers, Mujiyati et al. (2020) discovered that modernization of the administrative system has no effect on the compliance of MSME taxpayers.

In addition to reforming the administrative system, the government also encourages taxpayer compliance through intensive and periodic socialization regarding tax policies. This effort aims to increase taxpayers' understanding of

taxation, which in turn can enhance business actors' perception of the importance of tax payment. Insufficient socialization has resulted in limited public knowledge of tax obligations, leading to low awareness and compliance in tax reporting and payment (Hasbudin et al., 2022). To fulfill its goals, tax socialization initiatives are segmented into 3 categories: socialization for potential taxpayers, socialization for newly registered taxpayers, and socialization for existing taxpayers. Various forms of media, such as television, radio, print, social media and in-person interactions, can be utilized for socialization. Through these mediums, individuals can gain a better understanding of tax-related information, leading to increased taxpayer awareness and compliance (Rahmawati, 2022). Previous studies by Rahayu et al. (2020) and Lestary et al. (2021) indicates a positive influence of socialization on the compliance of MSME taxpayer. In contrast to two previous researchers, Afriani et al. (2022) found that socialization didn't impact the compliance of MSME taxpayer.

In addition to implementing TI changes, DGT is also undertaking organizational and human resources restructuring. An example of this reformation is the appointment of an account representative office at the primary service office (KPP). Tax compliance can also be impacted by the supervision carried out by tax officer, responsible for providing services and supervision to taxpayers (Mimi & Mulyani, 2022). In accordance with Circular Letter SE-49/PJ/2016 issued by the Director General of Taxes, taxpayer supervision involves a sequence of data analysis activities and the subsequent actions taken based on the findings to assess tax potential, ensure compliance with tax obligations, and enhance tax revenue within the legal framework and regulations pertaining to taxation. It is expected that improvement in supervision by account representative in supervise taxpayers will lead to an increase the taxpayer's compliance. Previous research by Sandi and Trisnawati (2023) and Ayuningtya and Samosir (2022) indicates a positive influence of tax supervision on the tax compliance of MSMEs. In contrast to two previous researchers, Mardiana (2021) found that tax supervision had no impact on the tax compliance of MSMEs.

As discussed earlier and the findings from various studies, this research aims to investigate whether the modernization of the tax administration system, tax socialization, and tax supervision contribute positively to the tax compliance of MSMEs in Batam City.

LITERATURE REVIEW

Theory of Planned Behavior

This theoretical framework provides a comprehensive model for understanding and predicting individual behavior by considering their beliefs, opinions, social expectations, and ability to control their actions. It builds upon the Theory of Reasoned Behavior, it was originally created by Fishbein in 1967 and later expanded by Ajzen to become the theory of planned behavior. According to this theory, an individual's behavior is influenced by intentions, which are shaped by a

combination of three main factors: behavioral beliefs, normative beliefs, and control beliefs (Bosnjak et al., 2020). In context of tax compliance, this theory suggests that an individual's attitude towards paying taxes directly influences their intention to comply. For instance, if someone perceives tax payment as a civic duty and holds a positive attitude towards it, they are more likely to adhere to tax regulations.

Technology Acceptance Model

This model describes the essential factors that affect an individual's decision to use technology-based information, underscoring the impact of the user's personal perceptions and responses. The measure for accepting a technology is based on the individual's judgment of its usefulness and ease of use (Mimi & Mulyani, 2022). In the context of digital taxation, developing an efficient and user-friendly digital tax system can potentially generate greater interest among taxpayers, and leading to increased compliance.

Micro, Small, and Medium Enterprises (MSMEs)

MSMEs are business that operate independently and are not subsidiaries or branches of larger corporations. They are either directly or indirectly owned, controlled, or linked to a medium or large-sized Business that meets the criteria for a small business (Mapuasari et al., 2023). According to Law No. 20 of 2008, MSMEs are categorized according to specific criteria. This includes micro enterprises that have a maximum of 50 million rupiah in assets and annual turnover must not exceed 300 million rupiah. Small enterprises with assets valued between 50 million to 500 million rupiah and annual turnover ranging from 300 million to 2,5 billion rupiah. Meanwhile, medium enterprises have assets ranging from 500 million above to 10 billion rupiah and annual turnover from 2.5 billion above to 50 billion rupiah.

Tax Compliance

Taxpayer compliance refers to the behavior or actions undertaken by individuals or organizations to fulfill their tax responsibilities as specified by the government. This includes understanding, recognizing, and fully implementing, acknowledging, and effectively adhering to relevant tax laws, such as precise reporting, punctual tax payments, and meeting administrative and other requirements established by tax authorities (Yoga & Dewi, 2022).

Modernization of Tax Administration System

The modernization of the tax administration system involves the execution of different programs and activities outlined in the medium-term tax administration reform. This process aims to enhance individual, group, and institutional performance to achieve greater efficiency, cost-effectiveness, and speed, which is a form of tax administration reform (Pernamasari & Rahmawati, 2021). The objective of modernizing the tax system and implementing an electronic system is to enhance tax compliance, boost public trust in tax administration, improve the productivity of tax employees, and increase efficiency in meeting tax revenue goals. Furthermore,

incorporating information technology in taxation aims to streamline processes, saving time and ensuring greater accuracy (Jaya, 2019).

Tax Socialization

Tax socialization involves the process of providing information about taxes in order to bring about changes in the knowledge, skills, and attitudes of the community, businesses, government institutions, and non-governmental organizations. This is aimed at encouraging understanding, awareness, and participation in fulfilling tax obligations. The process of tax socialization or counseling can be conducted through direct interactions with taxpayers or prospective taxpayers via activities such as tax clinics, seminars, workshops, and training. It can also be carried out indirectly through mediums such as newspapers, magazines, brochures, and other publications (Hasbudin et al., 2022).

Tax Supervision

Account Representative supervision involves monitoring and ensuring that taxpayers have fulfilled their tax obligations accurately and appropriately. This supervision goes beyond simply observing and reporting on monitoring activities, as it also involves enhancing and rectifying any issues to ensure that goals are achieved as planned. Supervision serves as a way for Account Representatives to focus on taxpayers and their compliance. By effectively supervising and monitoring taxpayers, the aim is to increase the number of compliant taxpayers in accordance with the law (Amah, 2019).

HYPOTHESIS DEVELOPMENT

The Effect of Modernization of Tax Administration System on The Compliance of MSME Taxpayer

The tax administration system is essentially a way for the DGT to introduce new and improved methods to assist taxpayers in meeting their tax responsibilities more efficiently (Palguna & Dewi, 2023). According to the findings of Hapsari and Kholis (2020), (2022), and Safitri et al. (2023), modernization of the administrative system has a positive impact on the compliance of MSME taxpayers. Based on the information provided earlier, the researcher developed hypothesis as follow:

H₁: The modernization of tax administration system has a positive and significant effect on the compliance of MSME taxpayer

The Effect of Tax Socialization on The Compliance of MSME Taxpayer

Lack of socialization leads to a limited understanding among taxpayers about tax regulations, resulting in many taxpayers failing to fulfill their responsibilities. By increasing awareness and promoting better comprehension through socialization, it can lead to higher levels of taxpayer compliance (Nono & Tyas, 2023). The researched findings of Rahayu et al. (2020) and Lestary et al. (2021) indicates a positive influence

of socialization on the compliance of MSME taxpayer. Based on the information provided earlier, the researcher developed the following hypothesis:

H₂: The tax socialization has a positive and significant effect on the compliance of MSME taxpayer

The Effect of Tax Supervision on The Compliance of MSME Taxpayer

Tax supervision conducted by account representative aims to ensure that taxpayers comply with tax regulations and to analyze their compliance with their tax responsibilities. An effective supervision is expected to reduce tax evasion and increase tax compliance and tax revenue (Afe et al., 2022). The researched findings of Sandi and Trisnawati (2023) and Ayuningtya and Samosir (2022) indicates a positive influence of tax supervision on the tax compliance of MSME. Based on the the explanation, the researcher developed the following hypothesis:

H₃: The tax supervision has a positive and significant effect on the compliance of MSME taxpayer

The Effect of Modernization of Tax Administration System, Tax Socialization, and Tax Supervision on The Compliance of MSME Taxpayer

The key to improving taxpayer compliance lies in the modernization of the system through technological advancements. By increasing public awareness through socialization, taxpayers can gain a better understanding of taxation. Additionally, effective supervision from tax officers can minimize opportunities to evade their tax obligations. According to information provided earlier, the researcher developed the following hypothesis:

H₄: The Modernization of Tax Administration System, Tax Socialization, and Tax Supervision simultaneously have a positive and significant effect on the compliance of MSME Taxpayer

RESEARCHED METHOD

This study employs a quantitative method, using both primary and secondary data. The primary data is in the form of questionnaire, while the secondary data is sourced from various references such as books, articles, and statistical data obtained directly from KPP Pratama Batam. The research population consists of MSME taxpayers registered at KPP Pratama South Batam as of 2022. To determine the sample size, the researcher utilized the Slovin formula with a 10% of error rate, resulting in 100 respondents. The researcher chose random sampling as the sampling technique. Data collection was conducted by distributing questionnaires via Google Forms. The collected data will be assessed using a Likert scale and analyzed using the SPSS version 25 software. The data analysis includes validity test, reliability test, normality test, multicollinearity test, heteroscedasticity test, t-test, F-test, and determination coefficients.

RESULT AND DISCUSSION

Result

Validity Test

Validity test is to determine if a question or statement in the questionnaire is valid. It can be determined by comparing the value of r count and r table. If the r count is greater than r table, then it is considered valid.

Table 3. Validity Test Results

Variable	Item	r count	r table	Remark
Modernization of Tax Administration System (X1)	X1.1	0,486	0,197	Valid
	X1.2	0,579	0,197	
	X1.3	0,671	0,197	
	X1.4	0,711	0,197	
	X1.5	0,656	0,197	
Tax Socialization (X2)	X2.1	0,723	0,197	Valid
	X2.2	0,750	0,197	
	X2.3	0,756	0,197	
	X2.4	0,691	0,197	
	X2.5	0,765	0,197	
Tax Supervision (X3)	X3.1	0,714	0,197	Valid
	X3.2	0,697	0,197	
	X3.3	0,808	0,197	
	X3.4	0,830	0,197	
Taxpayer Compliance (Y)	Y.1	0,566	0,197	Valid
	Y.2	0,639	0,197	
	Y.3	0,644	0,197	
	Y.4	0,499	0,197	
	Y.5	0,751	0,197	

Source: Output SPSS version 25

The above table indicates that the value of r count for each question is greater than r table. The r table value for this two-sided test is derived from the table (with $Df = n-2 = 100-2 = 98$), which is 0,197. Therefore, each statement item from each variable is considered to be valid.

Reliability Test

Reliability testing is conducted to verify the consistency and dependability of responses obtained from respondents. The reliability of the data can be assessed using the Cronbach's Alpha value. the data is considered reliable if it exceeds 0,60.

Table 4. Reliability Test Results

Variable	Cronbach's Alpha	Remark
Modernization of tax administration system (X1)	0,609	Reliable
Tax Socialization (X2)	0,790	Reliable
Tax Supervision (X3)	0,760	Reliable
Tax Compliance (Y)	0,602	Reliable

Source: Output SPSS version 25

The table above provides us with data on the Cronbach's alpha value for each variable. All the values are greater than 0,60, indicating that the research data can be considered reliable.

Normality Test

In statistics, the normality test is a method used to determine if a dataset is normally distributed or if it deviates from a normal distribution (Nuryadi *et al.*, 2017). There are various approaches to assessing the normality of data, such as examining histograms, Normal P- plots, and conducting the Kolmogorov-Smirnov test.

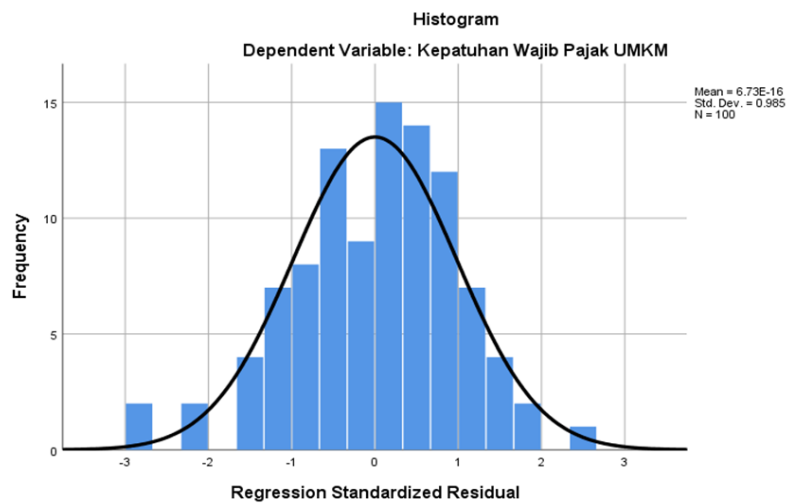


Figure 1. Histogram

Source: Output SPSS version 25

Upon observation of the graph, it is evident that the curve has a bell-shaped form, indicating that the data follows a normal distribution pattern.

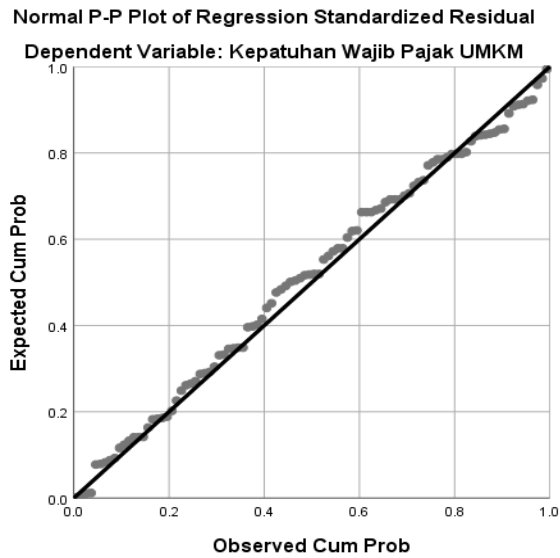


Figure 2. Normal P-Plot
 Source: Output SPSS version 25

After analyzing the graph, the data points are distributed along the line in a diagonal pattern, indicating that the research data follows a normal distribution. To validate this interpretation, researcher conducted a One-Sample Kolmogorov-Smirnov test.

Table 5. Kolmogorov-Smirnov Test Results

One-Sample Kolmogorov-Smirnov Test		Unstandardized Residual
N		100
Normal Parameters ^{a,b}	Mean	.0000000
	Std. Deviation	1.40420779
Most Extreme Differences	Absolute	.065
	Positive	.050
	Negative	-.065
Test Statistic		.065
Asymp. Sig. (2-tailed)		.200 ^{c,d}

- a. Test distribution is Normal.
- b. Calculated from data.
- c. Lilliefors Significance Correction.
- d. This is a lower bound of the true significance.

Source: Output SPSS version 25

Based on the information presented in the table, the two-tailed asymp. sig value is 0,200, indicating that it exceeds 0,05. Therefore, it can be inferred that the data follows a normal distribution.

Multicollinearity Test

Multicollinearity test is conducted to identify any indications of multicollinearity. This involves examining the tolerance value and VIF value. If the tolerance value exceeds 0.10 and the VIF value is less than 10, then the dataset is considered to be free from multicollinearity.

Table 6. Multicollinearity Test Results

Model		Coefficients ^a	
		Tolerance	VIF
1	(Constant)		
	Modernisasi Sistem Administrasi Pajak	.462	2.166
	Sosialisasi Pajak	.396	2.526
	Pengawasan Pajak	.698	1.433

a. Dependent Variable: Kepatuhan Wajib Pajak UMKM

Source: Output SPSS version 25

Upon analyzing the information presented in the table, it is evident that the tolerance value exceeds 0,60 for all independent variables, and the VIF value for each variable is less than 10, indicating that the data has successfully passed the multicollinearity test.

Heteroscedasticity Test

Heteroscedasticity test is carried out to determine if the variables being studied have consistent (homoscedastic) or inconsistent (heteroscedastic) variances. Glejser test will be carried out to examine the result.

Table 7. Glejser Test Results

Model		Coefficients ^a			t	Sig.
		Unstandardized Coefficients		Standardized Coefficients		
B	Std. Error	Beta				
1	(Constant)	-1.487	1.015		-1.466	.146
	Modernisasi Sistem Administrasi Pajak	.106	.065	.236	1.629	.107
	Sosialisasi Pajak	.014	.052	.041	.264	.792
	Pengawasan Pajak	.002	.049	.005	.040	.968

a. Dependent Variable: abs_RES

Source: Output SPSS version 25

Upon analyzing the data presented in the table, it is evident that the sig. value exceeds 0,05, indicating that the data has successfully passed the heteroscedasticity test.

t Test

The t-test is a statistical method used to assess the significance of individual regression coefficients, in order to determine the impact of each variable on the dependent variable. It can be determined by the significance value and by comparing the value of t count and t table.

Table 8. T-Test Results

Model		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.744	1.715		2.184	.031
	Modernisasi Sistem Administrasi Pajak	.318	.110	.282	2.881	.005
	Sosialisasi Pajak	.343	.088	.413	3.904	.000
	Pengawasan Pajak	.186	.083	.178	2.238	.027

a. Dependent Variable: Kepatuhan Wajib Pajak UMKM

Source: Output SPSS version 25

Based on the data presented in the table, the significant value of X1 is 0,005, X2 is 0,000, X3 is 0,27, which are less than 0,05, and the value of t count of X1 2,881, X2 3,904, and X3 2,238, which are greater than t table (1,985). In conclusion, modernization of tax administration system (X1), tax socialization (X2), tax supervision (X3) has a positive and significant effect on the compliance of MSME taxpayer (Y).

F Test

This test is aimed to determine whether the independent variable simultaneously effect on the dependent variable. It can be determined by the significance value and by comparing the value of F count and F table through the Anova test.

Table 9. F-Test Results

Model		ANOVA ^a				
		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	264.792	3	88.264	43.407	.000 ^b
	Residual	195.208	96	2.033		
	Total	460.000	99			

a. Dependent Variable: Kepatuhan Wajib Pajak UMKM

b. Predictors: (Constant), Pengawasan Pajak, Modernisasi Sistem Administrasi Pajak, Sosialisasi Pajak

Source: Output SPSS version 25

Based on the data presented in the table, the significant value of independent variable is 0,000, which are less than 0,05, and the value of f count is 43,407, which is greater than f table (2,70). In conclusion, modernization of tax administration system (X1), tax socialization (X2), tax supervision (X3) simultaneously have an effect on the compliance of MSME taxpayer (Y).

Coefficient of Determination Test

The coefficient of determination test measures the percentage of variation in the dependent variable that can be explained by the independent variable.

Table 10. Coefficient of Determination Test Results

Model Summary ^b				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.759 ^a	.576	.562	1.426

a. Predictors: (Constant), Pengawasan Pajak, Modernisasi Sistem Administrasi Pajak, Sosialisasi Pajak
 b. Dependent Variable: Kepatuhan Wajib Pajak UMKM

Source: Output SPSS version 25

The table shows that the Adjusted R Square is 0,562, or equivalent to 56,2%. It indicates that the independent variables, namely modernization of the tax administration system, tax socialization, and tax supervision collectively influence 56,2% of taxpayer compliance. The remaining 43,8% is attributed to other variables.

DISCUSSION

The Effect of Modernization of Tax Administration System on The Compliance of MSME Taxpayer

This study indicates that there is a positive and significant effect of modernization of tax administration system on the compliance of MSME taxpayer. This statement is supported by t-test results that shows the value of t count (2,881) is greater than t table (1,985), leading to the acceptance H₁.

The Effect of Tax Socialization on The Compliance of MSME Taxpayer

This study indicates that there is a positive and significant effect of tax socialization on the compliance of MSME taxpayer. This statement is supported by t-test results that shows the value of t count (3,904) is greater than t table (1,985), leading to the acceptance H₂.

The Effect of Tax Supervision on The Compliance of MSME Taxpayer

This study indicates that there is a positive and significant effect of tax socialization on the compliance of MSME taxpayer. This statement is supported by t-test results that shows the value of t count (2,238) is greater than t table (1,985), leading to the acceptance H₃.

The Effect of Modernization of Tax Administration System, Tax Socialization, Tax Supervision on The Compliance of MSME Taxpayer

This study indicates that the independent variables, namely modernization of tax administration system, tax socialization, tax supervision simultaneously have an effect on the compliance of MSME taxpayer. This statement is supported by t-test results that shows the value of F count (43,407) is greater than F table (2,70), leading to the acceptance H_4 .

CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of this study, it indicate that modernization of tax administration system had a positive and significant effect on the compliance of MSME Taxpayer in Batam City. It can be concluded that an improved and simplified tax administration system in Indonesia will lead to higher level of tax compliance. The implementation of advanced technology can enhance efficiency, transparency, and overall service quality.

This finding of this study proves that tax socialization had a positive and significant effect on the compliance of MSME Taxpayer in Batam City. It can be concluded that regular socialization leads to higher levels of tax compliance. Moreover, the socialization not only raise taxpayer awareness, but also foster a more positive and collaborative relationship between MSMEs and tax authorities, making the tax process more transparent and less intimidating.

This study also indicates that tax supervision had a positive and significant effect on the compliance of MSME Taxpayer in Batam City. It can be concluded that greater supervision leads to higher level of tax compliance. Intensive supervision will increase taxpayer awareness of the risks associated with non-compliance. Furthermore, fair and consistent supervision can enhance the credibility of the taxation system, fostering trust among MSMEs that all enterprises are subject to fair treatment.

Future researchers are encouraged to expand this study by modifying or incorporating different independent variables. Additionally, they can introduce new research methodologies, such as interviews, and broaden the sample size if the research duration allows for it. As for the government, specifically Directorate General of Taxes and its divisions, is expected to further develop and enhance the administrative system through greater implementation of information technology. Meanwhile, KPP Pratama Batam Selatan should aim to enhance their outreach efforts to improve taxpayer education and awareness. Additionally, tax officials need to prioritize effective and equitable supervision to ensure compliance.

REFERENCES

- Afe, B. R., Lestari, E. P., & Gunawan, D. S. (2022). Pengaruh Pengawasan Pajak dan Pemeriksaan Pajak Terhadap Penerimaan Pajak Dengan Kepatuhan Wajib Pajak Sebagai Variabel Intervening Pada KPP Pratama Cilegon. *Attractive : Innovative Education Journal*, 4.
- Afriani, zeta, & nuril. (2022). *Dampak Sosialisasi Perpajakan, Pemahaman Wajib Pajak, Tarif Pajak, Sanksi Pajak dan Kualitas Pelayanan Fiskus terhadap Kepatuhan Wajib Pajak*.
- Amah, N. (2019). *Modernisasi Sistem Administrasi & Tax Amnesty: Faktor Pendukung Kepatuhan Pajak* (1st ed.). UNIPMA Press (Anggota IKAPI).
- Ayuningtya, S. N., & Samosir, D. K. B. M. (2022). Faktor – Faktor Yang Mempengaruhi Kepatuhan Wajib Pajak UMKM di Kota Tangerang. *Prosiding Ekonomi Dan Bisnis*, 1.
- Bosnjak, M., Ajzen, I., & Schmidt, P. (2020). The Theory of Planned Behavior: Selected Recent Advances and Applications. *Europe's Journal of Psychology*, 16(3).
- Giffary, M. R. (2023). Efek Modernisasi Administrasi Perpajakan Terhadap Kepatuhan Wajib Pajak. *Fair Value : Jurnal Ilmiah Akutansi Dan Keuangan*, 4.
- Hapsari, A., & Kholis, N. (2020). Analisis Faktor -Faktor Kepatuhan Wajib Pajak UMKM di KPP Pratama Karanganyar. *Reviu Akuntansi Dan Bisnis Indonesia*, 4, 56–67.
- Hasbudin, Dharmawaati, T., & Ruslin. (2022). Reducing MSME Tax Rates and Socialization Against Taxpayer Compliance. *East Asian Journal of Multidisciplinary Research (EAJMR)*, 1.
- Jaya, D. N. K. (2019). Pengaruh Penerapan Sistem Modernisasi Administrasi Pajak, Kualitas Pelayanan dan Pengetahuan PPN Terhadap Kepatuhan Wajib Pajak di DKI Jakarta. *Jurnal Muara Ilmu Ekonomi Dan Bisnis*, 3.
- Kusumadewi, D. R., & Dyarini. (2022). Pengaruh Literasi Pajak, Modernisasi Sistem Administrasi, Insentif Pajak dan Moral Pajak Terhadap Kepatuhan Wajib Pajak UMKM. *Jurnal Akuntansi Dan Keuangan (JAK)*, 10.
- Lestary, S. R., Sueb, M., & Yudianto, I. (2021). The Effect of Tax Fairness, Tax Socialization, and Tax Understanding on Tax Compliance : A Study on Micro, Small and Medium Enterprises (MSMEs). *Journal of Accounting Auditing and Business*, 4.
- Mapuasari, S. A., Wibowo, Y. S., & Cakranegara, P. A. (2023). Tax Incentive-Based Economic Policy, Modern Tax Administration System, and Taxpayer Compliance of Micro, Small, and Medium Enterprises. *Journal of Accounting and Strategic Finance*, 6.

- Mardiana. (2021). *Analisis Perubahan Tarif Pajak, Amnesti Pajak, E-Billing System, dan Sistem Pengawasan Wajib Pajak Terhadap Kepatuhan Wajib Pajak UMKM di Kota Serang*. 1.
- Mimi, & Mulyani, S. D. (2022). Pengaruh Pelayanan, Pengawasan, dan Pemeriksaan Pajak Terhadap Kepatuhan Wajib Pajak Badan Yang Dimoderasi Digitalisasi Administrasi Perpajakan. *Jurnal Magister Akuntansi Trisakti*, 9.
- Mujiyati, Sekarwangi, G. L., & Palupi, I. D. (2020). Taxpayer Compliance on Micro, Small and Medium Enterprises Individual Taxpayer in Surakarta. *Riset Akuntansi Dan Keuangan Indonesia*, 5.
- Murnidayanti, S. A., & Putranti, T. M. (2023). The Effectiveness of Digitizing Tax Administration to Reduce the Compliance Cost of Taxpayers of Micro, Small, and Medium Enterprises (MSMEs). *Jurnal Public Policy*, 9.
- Nono, V. R. M., & Tyas, A. M. (2023). Pengaruh Sosialisasi Perpajakan dan Pemahaman Wajib Pajak Terhadap Kepatuhan Wajib Pajak Usaha Mikro Kecil Dan Menengah (UMKM) (Studi Kasus Pada Kantor Pelayanan Pajak Pratama Atambua). *Soetomo Accounting Review*, 1.
- Palguna, I. G. B., & Dewi, P. E. D. M. (2023). Pengaruh Aplikasi M-Pajak, Sosialisasi Perpajakan, dan Tax Compliance Cost Terhadap Kepatuhan Wajib Pajak UMKM Orang Pribadi Yang Terdaftar Di KPP Pratama Singaraja. *VJRA*, 12.
- Pebrina, R., & Hidayatulloh, A. (2020). Pengaruh E-SPT, Pemahaman Peraturan Perpajakan, Sanksi Perpajakan, Dan Kualitas Pelayanan Terhadap Kepatuhan Wajib Pajak. *Jurnal Ilmiah Ekonomi Dan Bisnis*, 17.
- Pernamasari, R., & Rahmawati, S. N. (2021). Analisis Penerapan Modernisasi Sistem Administrasi Perpajakan Terhadap Tingkat Kepatuhan Wajib Pajak Pada Kantor Pelayanan Pajak Pratama Kembangan Jakarta. *Jurnal Akuntansi, Keuangan, Pajak, Dan Informasi (JAKPI)*, 1.
- Rahayu, K. A., Bawono, I. R., & Sudibyoy, Y. A. (2020). The Influence of Accounting Knowledge in Moderating Relationship Between Understanding and Socialization of Tax to MSMEs Tax Compliance. *Jurnal Akuntansi Dan Bisnis*, 20.
- Rahmawati, S. (2022). The Effect of Tax Socialization, Tax Knowledge And Tax Morale On Tax Compliance. *International Journal of Educational Research & Social Sciences*, 3.
- Safitri, C., Budiarto, A., & Romadon, A. S. (2023). The Effect of Tax Knowledge, Tax Dissemination and Modernization of The Tax Administration System on Taxpayer Compliance (Case Study of Bandeng Presto MSMEs Registered in The IUMK Semarang City). *Jurnal Ekonomi*, 12.

- Sandi, & Trisnawati, E. (2023). Compliance Cost and Officer's Supervision On MSME's Tax Compliance Moderated by Tax System Modernization. *Interdisciplinary Social Studies*.
- Sari, P. R. (2020). Pengaruh Persepsi Pelayanan dan Kemudahan Penggunaan Sistem Online Perpajakan Terhadap Kepatuhan Wajib Pajak Orang Pribadi Di KPP Pratama Surabaya Sawahan. 1-1.
- Tobing, E. G. L., & Kusmono. (2022). Modernisasi Administrasi Perpajakan: NIK Menjadi NPWP. *Jurnal Pajak Indonesia*, 6(2).
- Yoga, I. G. A. P., & Dewi, T. I. A. L. A. (2022). Pengaruh E-Filing, Sosialisasi, Kesadaran Wajib Pajak, Dan Sanksi Perpajakan Terhadap Kepatuhan Wajib Pajak Orang Pribadi. *Krisna : Kumpulan Riset Akuntansi*, 14.