THE EFFECT OF E-BILLING USAGE, SYSTEM QUALITY, AND TAX SANCTIONS ON TAXPAYER COMPLIANCE

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Abstract

Purpose: This study's goal is to investigate the effects of e-billing usage, system quality, and tax penalties on taxpayer compliance, providing empirical evidence on how these factors influence compliance levels.
Methodology: The study sampled 100 taxpayers from 38,448 at the Jepara Tax Office using the Slovin formula and accidental sampling. Data were collected via questionnaires and analyzed using multiple linear regression in SPSS, assessing e-billing, system quality, and tax penalties.
Findings: Significant influences on taxpayer compliance include the use of e-billing, system quality, and tax penalties; these factors account for 19.3% of the variation, with other factors influencing the remaining 80.7%. A significant effect is indicated by the F-test results, which show a value of 0.001.
Limitation: Due to its small sample size (100 respondents) and focus on Jepara taxpayers only, the study may not be able to generalize its findings to other areas or larger populations.
Contribution: This study contributes empirical evidence on how e-billing usage, system quality, and tax penalties significantly affect taxpayer compliance, explaining 19.3% of its variation, offering insights for improving tax administration strategies.
Novelty: This study offers a novel contribution by examining the specific influence of e-billing usage, system quality, and tax sanctions on taxpayer compliance within the context of the Jepara Primary Tax Service Office. While previous studies have explored various factors affecting tax compliance, this research uniquely integrates these three variables, highlighting the role of technology (e-billing) and system quality alongside traditional compliance factors like tax sanctions.
Keywords: e-billing usage, system quality, tax penalties, taxpayer compliance

1. Introduction

Tax payment is an obligation for every citizen which aims to provide funding for both national development and government operations. However, there are still many taxpayers who are not compliant in paying taxes. According to data from the Directorate General of Taxes, the tax compliance rate in Indonesia in 2023 remained low, with only about 61.08% of registered taxpayers fulfilling their tax obligations. (Kurniati, 2023)

According to Ismanto (2020) One important indicator of a country's tax system is the level of tax compliance, which shows the extent to which taxpayers comply with their obligation to pay taxes. In many countries, including Indonesia, low tax compliance rates are often a serious problem affecting state revenues and the quality of public services. Some factors that can affect the level of tax compliance include the use of e-billing, the quality of the tax system, and the application of sanctions. (Devi Panjaitan et al., 2023)

The latest innovation in the tax system, e-billing is expected to significantly increase the level of public compliance with taxes (Fitria, 2023). This system utilizes digital technology to more efficiently, speed up, and integrate the tax payment process, allowing taxpayers to conduct transactions online from anywhere and at any time. This will definitely reduce the need to go directly to the tax office, which often requires a lot of time and effort, and will also reduce crowds in the service room. E-billing also helps reduce data entry errors as sophisticated automation systems can ensure that the data entered is correct.

By providing convenience, comfort, and speed in the payment process, it is expected that more people will be encouraged to use e-billing as the primary option to fulfill their tax obligations. An increase in the number of taxpayers using e-billing will not only help the government optimize their tax revenue, but will also increase public awareness of the importance of tax compliance, which in turn will result in improved public services.

Tax compliance is an important component in maintaining financial stability and supporting the country's growth. The quality of the tax system is a component that cannot be ignored and is very important to achieve a high level of compliance. A good tax system should be transparent, easily accessible, and able to provide clear and precise information to taxpayers. Thus, an effective system will make it easier for taxpayers to understand and fulfill their tax obligations.

Conversely, taxpayers may become non-compliant due to a complicated and inefficient system. It is possible that people are not actively involved in fulfilling tax obligations due to unclear or inaccessible procedures. Therefore, improving the quality of the tax system is crucial to ensure that taxpayers not only understand their obligations but are also motivated to better comply with them.

The government can improve tax compliance through a responsive and user-friendly tax system, which in turn will increase state revenues and enable better allocation of resources to various development programs. In this context, focusing on improving the quality of the tax system is not only a necessity but also a strategic move to create a diversified culture of tax compliance.

To improve tax compliance, strict and consistent tax sanctions are essential. Sanctions in taxes not only encourage people to meet their obligations, but also act as law enforcement that confirms that tax obligations are serious and must be respected by all people and organizations. Tax obligations are often taken for granted or can be ignored in the absence of clear and consistent sanctions. Ultimately, this can lead to a significant drop in tax compliance rates.

It is imperative for tax authorities to formulate and implement sanctions that are proportional, fair, and transparent according to the level of violation because uncertainty regarding the consequences of non-compliance can create the perception that tax violations are acceptable, which is detrimental to state revenue and social development. Tax sanctions can serve as a positive catalyst that encourages taxpayers to fulfill their obligations accurately and on time if used in an appropriate manner.

In addition, consistency in the application of sanctions also demonstrates the importance of tax compliance to the public and increases trust in the tax system. If taxpayers see firm sanctions, consistent application, and clear communication from tax authorities, they will be more inclined to honor and comply with their tax obligations. This will help create a sustainable and effective culture of tax compliance in society.

In general, the creation of a conducive environment for tax compliance is anticipated through the integration of modern technologies like e-billing, a robust tax system, and the effective enforcement of tax penalties. Understanding how these three components relate to each other can help in designing more efficient tax policies and improve overall tax compliance.

Numerous earlier studies looked into how tax penalties, system quality, and e-billing usage affected tax compliance. Sari (2021) found that e-billing usage positively and significantly influences tax compliance. Similarly, Utami (2021) discovered that the quality of the tax system has a positive and significant effect on tax compliance. Additionally, Sianema (2022) demonstrated that tax sanctions also positively and significantly impact tax compliance.

However, differences in research results were found by Sulistyowati (2019), where the use of e-billing and the quality of the tax system did not have a significant effect on tax compliance. Additionally, research by Fadilah (2020) and Sudiartana (2022) also concluded that tax sanctions did not have a significant effect on tax compliance.

This study intends to examine the impact of system quality, tax penalties, and e-billing usage on taxpayer compliance, as stated in the above description.

2. Literature review and hypothesis/es development

2.1. Tax

According to Mardiasmo (2020) taxes are contributions that are mandatory and regulated by legal regulations with the aim of meeting the needs of the state in implementing fiscal policy and national development. Taxes play a role in financing various state expenditures, including infrastructure development, provision of public services, and provision of subsidies.

According to Official 2020, taxes are obligations that must be fulfilled by individuals and business entities to the state based on legal provisions that are compelling, without direct reward. The government uses taxes to pay for a range of state initiatives that are meant to enhance the general wellbeing of the populace. The official also emphasizes that taxes are one of the main sources of revenue for the government in implementing public policies

According to Darussalam et al. (2021), tax is an instrument used by the state to obtain revenue which is used in financing government activities. In addition, taxes also act as a tool to regulate the economy through fiscal policy. Taxes can affect the level of consumption and investment in society and contribute to the redistribution of income among citizens

From some of the explanation, it can be concluded that tax is a mandatory contribution regulated by law and serves as the main source of revenue for the state. Taxes have an important role in funding various state expenditures, such as infrastructure development, provision of public services, and subsidies aimed at improving people's welfare. In addition, taxes also serve as an economic regulatory tool through fiscal policy, which can influence consumption and investment levels and contribute to income redistribution among citizens. As such, taxes not only support government financing, but also play a role in achieving broader economic and social objectives.

2.2. Taxpayer Compliance

According to Sukarno and Rizki (2020), taxpayer compliance is a voluntary behavior carried out by taxpayers to report and pay taxes that are their obligations, based on legal awareness and social responsibility. This shows the active participation of the community in supporting state development through tax contributions.

According to Halim and Widyastuti (2021), taxpayer compliance is influenced by various factors, including knowledge of taxation, attitudes towards taxes, and the effectiveness of supervision from the tax authorities. The higher the level of knowledge and awareness of taxpayers about the importance of taxes, the more likely they are to comply in carrying out their tax obligations.

According to Prasetyo and Utami (2023), transparent and fair tax policies play an important role in improving taxpayer compliance. When people feel that the taxes they pay are used effectively for the public interest, they tend to be more compliant in fulfilling their tax obligations.

Based on this explanation, it can be inferred that taxpayer compliance is a voluntary behavior influenced by a variety of factors, such as awareness of legal obligations, a sense of social responsibility, knowledge about taxes, attitudes towards tax policies, and the efficiency of oversight by tax authorities. Compliance will increase along with the increasing awareness of taxpayers about the importance of taxes for state development. In addition, transparent and fair tax policies also contribute significantly to encouraging compliance, especially when people feel that the taxes they pay are used effectively for the public interest.

According to Hassan (2021), said that taxpayers have the ability and desire to comply with tax regulations, declare their income accurately every year, and pay taxes owed in a timely manner. And according to Sari M. E. (2020), states This research identifies that tax awareness, understanding of tax technology (such as e-billing), and providing appropriate sanctions can encourage the level of taxpayer compliance, especially in the digital era.

2.3. Use of E-Billing

Taxpayers can use the internet or mobile banking to make payments through the electronic tax payment system known as e-billing. This system is designed to make it easier for taxpayers to complete their tax obligations without the need to visit the tax service office or bank directly. (Santoso, 2019)

The implementation of e-billing is based on the idea of modernizing the tax system which aims to improve efficiency, accuracy, and convenience in the tax payment process. Logically, e-billing is expected to increase taxpayer compliance because this system provides easy access, time flexibility,

and reduced administrative burden. With a user-friendly electronic system, taxpayers can more easily report and pay their tax obligations. As a result, the increased use of e-billing is expected to make a positive contribution to taxpayer compliance, as a more efficient, transparent, and accurate system can reduce obstacles in the tax payment process (Sari W., 2021).

According to Fauzie and Wardani (2014), tax administration reform refers to enhancing and improving the administrative performance of individuals, groups, and institutions to make processes faster, more cost-effective, and efficient. Research Fitria and Hidayati (2023) found that the application of technology such as e-billing payment systems can increase the efficiency and ease of tax payments, which in turn can increase compliance.

According to Utami and Prasetyo (2022) also noted that e-billing increases time efficiency for taxpayers, which has a positive impact on compliance levels. Their research shows that taxpayers who utilize e-billing are more likely to pay taxes on time and report their tax obligations more accurately compared to those who use conventional payment methods.

H1: The use of the e-billing system has a positive impact on the level of mandatory compliance.

2.4. System Quality

According to Delon and McLean (2003), system quality is one of the most important aspects for evaluating the success of information systems, which includes aspects such as reliability, ease of use, responsiveness and flexibility. A quality system is a system that can produce products that are suitable and useful for its users, work perfectly without many errors, and can adapt to changing user needs and operating environments.

The quality of electronic billing systems affects taxpayers through a number of key factors such as ease of use, reliability, security and efficiency. A functional, secure, and easy-to-use e-invoicing system will increase efficiency and taxpayer confidence in paying taxes. The reliability and security of the system will reduce errors and increase transparency, thus making taxpayers more likely to fulfill their tax obligations on time. Therefore, improving the quality of the e-invoicing system will greatly encourage tax payments and reduce barriers in the tax payment process.

Measuring the quality of information systems and tax sanctions are two topics that have been widely researched in the previous few years. According to Iskandar (2020), the quality of information systems can be measured through several aspects, such as ease of use and speed of response. This is in line with research by Aryani and Pratiwi (2021), which found that user satisfaction increases when the information system has an optimal response time.

In the context of reliability, Ramadhani (2022) underlines that reliable information systems increase user trust, while Fauzie (2023) points out the importance of flexibility in the system to meet changing user needs. Research by Sari and Yuniar (2021) also notes that data security is a crucial aspect in assessing the quality of information systems, especially in today's digital era. Based on these theories and research, the hypothesis can be formulated as follows:

H2: System quality has a positive effect on the level of taxpayer compliance.

2.5. Tax Sanctions

Tax sanctions according to Mardiasmo (2018), are actions taken by the tax authorities against taxpayers who do not comply with their tax obligations according to statutory regulations. Tax sanctions have two main purposes, namely as pressure to punish violations and to prevent similar actions from occurring in the future. Depending on the severity of the offense, this penalty can be in the form of fines, confiscation, or penalty payments. Meanwhile, Sutedi (2011) states that tax sanctions function as a means of prevention (preventive) to ensure that taxpayers do not violate standards. To make sure that taxpayers fulfill their tax obligations, tax sanctions are implemented.

The goal of tax penalties is to improve taxpayer compliance by creating a deterrent effect. Taxpayers assess the risk of facing sanctions such as fines, interest or criminal sanctions for violating tax regulations. If the sanctions are considered too severe and the risk of non-compliance detection is high, the tax burden will be higher because the cost of non-compliance will be higher than the benefits

that can be achieved and will not be fulfilled. If applied correctly and appropriately, tax sanctions can be effective in encouraging tax payments.

Although some research has been conducted, there is a gap in understanding the interaction between information system quality and effectiveness. Research by Ardiyanto (2023) found that taxpayers' understanding of sanctions can affect their level of compliance. This study aims to explore the relationship and how the quality of information systems can affect taxpayer compliance through the application of sanctions. Based on these theories and research, the following hypothesis can be formulated:

H3: Tax Sanctions have a positive effect on the level of taxpayer compliance.

3. Methodology

3.1. Type of research

This study employs a quantitative research approach. It utilizes methods grounded in positivist philosophy to examine specific populations or samples. Samples are typically gathered randomly, and data is collected through research instruments. The aim of data analysis is to test the established hypothesis.

3.2. Population and Sample

All taxpayers whose information is available at the Jepara Primary Tax Service Office are the research population. KPP Pratama Jepara has 38,448 individual taxpayers and business entities registered until 2024. Only a small portion of the subjects of this study due to the very large number of individual and corporate taxpayers and to save time. To ensure that the sample is representative, the Slovin formula is used to determine the sample size. This was done because the researcher already knew a lot of the population involved in this study. With an error rate of 10%, a sizable population of 38,448 was taken as the sample:

$$n = \frac{N}{1 + N(e)^2}$$

N = total population
n = total sample
e = the desired significance (limit of accuracy) (percent inaccuracy due to sampling error). using a percentage allowance of ten percent in this study.

$$n = \frac{38.448}{1 + (38.448)(0{,}1)^2}$$

$$n = 99{,}74\ (digenapkan\ 100)$$

Therefore, the sample from each respondent totals one hundred.

3.3. Operational Definition of Research Variables

Tabel 1. Operational Definition

Variable	Operational Definition	Indicator	measurement
taxpayer compliance (Y)	Tax compliance refers to the adherence of taxpayers in fulfilling their tax payment obligations. It represents a condition in which taxpayers meet all their tax duties and exercise their tax-related rights (Meity, 2018).	1. Taxpayer registration 2. Possession of a Taxpayer Identification Number (NPWP) 3. Compliance in filling out the Annual Tax Return (SPT) 4. Reporting the Annual Tax Return (SPT) 5. Timeliness in submitting the Annual Tax Return (SPT)	Likert Scale

		6. Calculation of tax installments 7. Payment of tax installments 8. Accuracy in tax calculation 9. Payment of tax shortfall	
Use Of E-Billing	E-Billing, as defined by Husnurrosyidah & Suhadi (2017), is an electronic tax payment method that makes use of a 15-digit billing code produced by the tax billing system.	1. Usage simplicity 2. User contentment 3. Speed of Process 4. Safety of the System 5. Availability 6. affordability	Likert Scale
System Quality	The desired quality that users of an information system seek to attain in order to realize the goals and advantages of the system is known as system quality. (Asidiqi, H.,2019)	1. Ease of use 2. System effectiveness 3. Information security 4. Data protection 5. Satisfaction with system quality	Likert Scale
Tax Sanctions	Tax sanctions are a means of ensuring that tax laws, also referred to as tax norms, will be followed, according to Mardiasmo (2018). Stated differently, the aforementioned penalties serve as a disincentive for taxpayers to break tax laws..	1. Heavy sanctions should be imposed to educate taxpayers. 2. Tax sanctions must be strict with no tolerance. 3. Tax penalties should be proportional to the severity of the violation. 4. Sanctions must be applied in accordance with the relevant regulations..	Likert Scale

3.4. Data Collection Technique

The researcher collected data using the survey method. The aim was to assess the extent to which the use of e-billing, system quality, and tax sanctions influence taxpayer compliance. Those selected as samples were given questionnaires to respond to in order to gather research data. All individual taxpayers and business entities registered at the Jepara Primary Tax Service Office (KPP Pratama Jepara) were provided with the questionnaire. Respondents were informed about the questions to ensure accurate completion of the survey. The survey results were statistically analyzed using IBM SPSS Statistics version 29.0.

3.5. Analysis Technique

In this study, analysis is used as a crucial process for testing the data. The techniques applied in this research include:

3.5.1. Validity Test

The validity test is used to determine the accuracy of the questionnaire. A survey is considered valid if its questions provide useful information for evaluating a specific construct. Confirmatory component analysis is the type of validity analysis applied in this study to assess the accuracy of the indicators used for the constructs or variables (Ghozali, 2013). The question items are deemed valid if the calculated r-value (r-count) is greater than the r-value from the table (r-table).

3.5.2. Reliability Test

The reliability of the questionnaire is determined and serves as an indicator of the construct or variable. Generally, a survey is considered reliable if its results are consistent or stable. For the purposes of this study, the "one-shot" method, or single measurement, was chosen as a reliable measure. This

study examines a specific measurement by comparing it with other questions or analyzing how responses to other questions correlate with that measurement (Ghozali, 2013).

3.5.3. Normality Test

The purpose of this test is to determine whether the residual values follow a normal distribution (Ghozali, 2013). To assess normality, the Kolmogorov-Smirnov Test can be used. The test begins by identifying the following hypotheses: H0 indicates that the data is normally distributed, while Ha indicates that the data is not normally distributed, where:

a. H0 is accepted when the significance value (sig) exceeds the specified alpha level.

b.Ha is rejected when the significance value (sig) is less than or equal to the set alpha level

3.5.4. Multicollinearity Test

This test is used to measure the level of correlation between independent variables in the regression model. If there is no relationship between the independent variables, this model is considered effective (Ghozali, 2013). The variance inflation factor and tolerance values both show multicollinearity (VIF). These two metrics indicate how well each independent variable's independent peer can explain. This selection is based on two reasons. The first is that multicollinearity does not occur if the Tolerance value is greater or equal to the VIF value and smaller than 10. The second is that multicollinearity occurs if the Tolerance value is smaller or equal to 0.10 or equal to the VIF value.

3.5.5. Heteroskedasticity Test Results

This test determines whether the residuals of the regression model observations have unequal variances. Heteroskedasticity occurs when the variance of the residuals differs between two observations, while homoskedasticity occurs when it does not. A regression model with low heteroskedasticity is preferred (Ghozali, 2013). To measure heteroskedasticity, the Glejser test can be used, which regresses the absolute value of the residuals against the independent variables. The equation is as follows:

$$|Ut|=\alpha+Xt+vt$$

where:

a. If α is greater than 5%, it indicates that there is no heteroskedasticity (the significance probability is above the confidence level).

b. If α is less than 5%, it indicates that heteroskedasticity is present (the significance probability is below the confidence level).

3.5.6. Multiple Linear Regression Analysis

The researcher employs multiple linear regression analysis to predict the changes (increase or decrease) in the dependent variable (criterion) based on how the values of two or more independent variables function as predictor factors. Therefore, multiple regression analysis will be conducted in situations where there are at least two independent variables (Sugiyono, 2017: 275)

3.5.7. F Test (Simultaneous Test)

The model feasibility test is employed by researchers to evaluate whether the regression model is appropriate for use, based on its significance level. The model's effectiveness is evaluated through significance testing. If the significance value is greater than 0.05, the regression model is not suitable for use. Conversely, if the significance value in the F-test is less than 0.05, the regression model is deemed suitable for the research.

3.5.8. Coefficient of Determination

The coefficient of determination (R^2) is utilized to evaluate the model's capacity to explain the variation in the dependent variable. This value ranges between 0 and 1. A low R^2 value indicates that the independent variables poorly explain the variations in the dependent variable. According to Ghozali

(2013), when the R^2 value approaches 1, it suggests that the independent variables almost fully explain the changes in the dependent variable.

3.5.9. Individual Parameter Significance Test (t-Test)

To determine the extent of the influence each independent variable has on the dependent variable, the Individual Parameter Significance Test (t-Test) is used. This test measures the impact of e-billing usage and taxpayer compliance understanding (Ghozali, 2018). In this test, the calculated t-value (tcount) is compared to the critical t-value (t-table) at a 5% significance level. If the t-count is greater than the t-table, the alternative hypothesis (H1) is accepted. Additionally, if the significance value is less than 5%, it indicates that the independent variable has a modest but significant effect on the dependent variable.

4. Results and discussion

4.1. Validity Test Results

Validity refers to the accuracy or precision of the data. Valid data is defined as data that is accurate or precise. The validity test in this research indicates how accurately the research instrument measures the content or actual meaning of the concept being studied. A valid measurement tool is one that effectively collects accurate data (measures). The instrument is considered valid if the test criterion is met, where the calculated r-value (r-count) is greater than the r-value from the table (r-table) at a significance level of 0.05. If the calculated r-value is less than the r-table, the instrument is deemed invalid. The following table presents the results of the instrument validity test:

Table 2. Validity Test Results

Variable	Statement	R count	R table	Information
Use Of E-Billing (X_1)	X1.1	0,410	0,1966	Valid
	X1.2	0,395	0,1966	Valid
	X1.3	0,336	0,1966	Valid
	X1.4	0,234	0,1966	Valid
	X1.5	0,234	0,1966	Valid
	X1.6	0,398	0,1966	Valid
	X1.7	0,299	0,1966	Valid
System Quality (X_2)	X2.1	0,439	0,1966	Valid
	X2.2	0,438	0,1966	Valid
	X2.3	0,369	0,1966	Valid
	X2.4	0,335	0,1966	Valid
	X2.5	0,303	0,1966	Valid
Tax Sanctions (X_3)	X3.1	0,315	0,1966	Valid
	X3.2	0,392	0,1966	Valid
	X3.3	0,275	0,1966	Valid
	X3.4	0,396	0,1966	Valid
	X3.5	0,455	0,1966	Valid
Taxpayer Compliance (Y)	Y1	0,404	0,1966	Valid
	Y2	0,301	0,1966	Valid
	Y3	0,468	0,1966	Valid
	Y4	0,284	0,1966	Valid
	Y5	0,277	0,1966	Valid
	Y6	0,244	0,1966	Valid
	Y7	0,318	0,1966	Valid
	Y8	0,342	0,1966	Valid
	Y9	0,290	0,1966	Valid

Source: SPSS Data Output (2024)

Based on the table, it can be observed that all statement items related to the variables of e-Billing Usage, System Quality, Tax Sanctions, and Taxpayer Compliance are valid according to the results of

the validity test conducted using the SPSS statistical program for each variable used in this study. The test results show that the calculated r-value (r-count) is greater than the r-value from the table (r-table), indicating that all items are valid (r-count > r-table).

4.2. Reliability Test Results

The reliability test, which consists of the questionnaire, is used to evaluate the consistency and stability of respondents' answers to the questions related to the variables. An instrument is considered reliable if the Cronbach's Alpha value is greater than 0.6. Conversely, if the Cronbach's Alpha value is less than 0.6, the instrument is deemed unreliable. The results of the reliability test for the instrument are presented in the following table:

Table 3. Reliability Test Results

Variable	Cronbachs Alpha	N of Items
X1	0,615	7
X2	0,622	5
X3	0,611	5
Y	0,644	9

Source: SPSS Data Output (2024)

The reliability test results obtained from the SPSS program are displayed in the above table. The values of the variables E-Billing Usage (0.615), System Quality (0.622), Tax Sanctions (0.611), and Taxpayer Compliance (0.644) are the results of the tested reliability. As was previously mentioned, if an instrument has a Cronbach's Alpha value of more than 0.60, it is deemed reliable. As a result, all of the study's variables are considered reliable.

4.3. Results of Classical Assumption Tests

4.3.1. Normality Test Results

The Kolmogorov-Smirnov test can also be used to assess normality. The standard deviation and mean are parameters of normal distribution. In this study, the one-sample Kolmogorov-Smirnov test was employed to determine whether the sample data is normally distributed. If the significance value is greater than 0.05, the data is considered to be normally distributed

Table 4. Normality Test Result

One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		100
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	2.51429083
Most Extreme Differences	Absolute	.072
	Positive	.040
	Negative	-.072
Test Statistic		.072
Asymp. Sig. (2-tailed)[c]		.200[d]

a. Test distribution is Normal.
b. Calculated from data.
c. Lilliefors Significance Correction.
d. This is a lower bound of the true significance.
e. Lilliefors' method based on 10000 Monte Carlo samples with starting seed 926214481.

Source: SPSS Data Output (2024)

From the table above, it can be concluded that the data is normally distributed because the asymptotic significance (2-tailed) value is greater than 0.05.

4.3.2. Results of the Multicollinearity Test

Since each independent variable has a tolerance value greater than 0.1 and a variance inflation factor (VIF) less than 10, these independent variables are considered not to experience multicollinearity (no data collision).

Table 5. Multicollinearity Test Results

Coefficients

Model		Collinearity Statistics	
		Tolerance	VIF
1	Use Of E-Billing	0,925	1,081
	System Quality	0,965	1,036
	Tax Sanctions	0,901	1,110

a. Dependent Variabel: Kepatuhan Wajib Pajak

Source: SPSS Data Output (2024)

From the table above, it can be concluded that the variance inflation factor (VIF) values for each independent variable are greater than 0.1, and the tolerance values are below 10. Therefore, it can be concluded that there are no multicollinearity issues present.

4.3.3. Heteroskedasticity Test Results

This test is used to check whether the residuals from one observation in the regression model are different from the other residuals.

Table 6. Heteroskedasticity Test Results

Coefficients[a]

Model		Sig.
1	(Constant)	.248
	X1	.738
	X2	.424
	X3	.591

a. Dependent Variable: ABS_RES

Source: SPSS Data Output (2024)

Based on this table, the sig value > α (5% / 0.05) so it can be understood that the data is free from heteroscedasticity.

4.3.4. Results of the t-Test (Partial)

Assuming that other independent variables remain constant, the t-test is used to assess the significance of each independent variable's partial influence on the dependent variable.

Table 7. Results of the t-Test (Partial)

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Eror	Beta		
1 (Constant)	14,188	4,782		2,967	0,004
Use Of E-Billing	0,377	0,120	0,294	3,133	0,002
System Quality	0,301	0,126	0,220	2,399	0,018
Tax Sanctions	0,295	0,137	0,205	2,153	0,034

Source: SPSS Data Output (2024)

Based on the regression analysis using the t-test (partial test) above, the calculated t-values for each variable are as follows:

1. E-billing Usage Variable (X1)

The calculated t-value is 3.133, while the t-table value is 1.984. Since 3.133 > 1.984 and the significance value is 0.002 < 0.05, we conclude that H0 is rejected and Ha is accepted. This indicates that there is an influence of e-billing usage (X1) on taxpayer compliance (Y).

2. System Quality Variable (X2)

The calculated t-value is 2.399, while the t-table value is 1.984. Since 2.399 > 1.984 and the significance value is 0.018 < 0.05, we conclude that H0 is rejected and Ha is accepted. This indicates that there is an influence of system quality (X2) on taxpayer compliance (Y).

3. Tax Sanctions Variable (X3)

The calculated t-value is 2.153, while the t-table value is 1.984. Since 2.153 > 1.984 and the significance value is 0.034 < 0.05, we conclude that H0 is rejected and Ha is accepted. This indicates that there is an influence of tax sanctions (X3) on taxpayer compliance (Y).

4.3.5. Multiple Linear Regression Analysis

Multiple regression techniques are used to test the influence of two or more dependent variables. The following are the results of multiple regression

Tabel 8. Linear Regression Test Results

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Eror	Beta		
1 (Constant)	14,188	4.782		2,967	0,004
Use Of E-Billing	0,377	0,120	0,294	3,133	0,002
System Quality	0,301	0,126	0,220	2,399	0,018
Tax Sanctions	0,295	0,137	0,205	2.153	0,034

Source: SPSS Data Output (2024)

The dependent variable in this regression is taxpayer compliance (Y), while the independent variables in this study are e-billing usage (X1), system quality (X2), and tax sanctions (X3). Based on the results of the regression recap, the regression equation can be formulated as follows:

[Y = 14.188 + 0.377 X1 + 0.301 X2 + 0,295 X3 + 0.05]

1. The results of the multiple linear regression analysis indicate a positive constant value of 14.188, which means that if the independent variables do not change (i.e., the impact of the e-billing system usage is equal to zero), the level of taxpayer compliance (Y) is predicted to be 14.188.
2. A heightened perception of e-billing usage (X1) is projected to increase taxpayer compliance (Y) by 0.377.
3. Similarly, an improved perception of system quality (X2) is expected to enhance taxpayer compliance (Y) by 0.301.
4. Additionally, a more favorable perception of tax sanctions (X3) is anticipated to raise taxpayer compliance (Y) by 0.295.

4.3.6 F Test (Simultaneous Test)

The F test results show that the combined effects of e-billing usage, system quality, and tax sanctions positively influence taxpayer compliance. The F value is 8.917, with a significance level of 0.000, which is below 0.05. This confirms that the model is statistically significant and suitable for further interpretation.

Tabel 9. F Test (Simultaneous Test)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	174,396	3	58,132	8,917	,000[b]
	Residual	625,844	96	6,519		
	Total	800,240	99			

a. Dependent Variable: Y

b. Predictors: (Constant), X3, X2, X1

4.3.6. Coefficient of Determination (R^2) Test

To evaluate how much an independent variable influences a dependent variable, one uses the coefficient of determination (R^2). R^2 values range from zero to one (0 to 1). The ability of the independent variables to explain the variation in the dependent variable is limited when the R^2 value is low. The statistical calculations for the coefficient of determination in this study were performed using the SPSS 29 software. The results of the data processing with SPSS 29 can be seen in the following table:

Tabel 10. Coefficient of Determination Test Results (R)

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.467[a]	.218	.193	2.55327

a. Predictors: (Constant), X3, X2, X1

b. Dependent Variable: Y

Source: SPSS Data Output (2024)

Based on the SPSS output model summary, the value of the coefficient (Adjusted R Square) is 0.193, which indicates that collectively, the e-billing system (X1), system quality (X2), and tax sanctions (X3) have an impact on taxpayer compliance (Y) of 0.193 or 19.3%. This suggests that only 19.3% of the variation in the dependent variable can be explained by e-billing usage, system quality, and tax sanctions, while the remaining 80.7% is influenced by factors beyond the scope of this study.

4.4. Discussion of Data Analysis Results

a. The Impact of the e-Billing System (X_1) on Taxpayer Compliance (Y)

Based on the first hypothesis (H1), which is accepted, this study confirms that the e-billing payment system has a positive and significant effect on taxpayer compliance. A significance value of 0.002, or less than 0.05, is used to support this. In other words, taxpayer compliance behavior is influenced by the introduction of electronic invoicing. E-billing is a government revenue system that allows taxpayers to make tax payments quickly and accurately, aimed at enhancing taxpayer compliance.

Based on the research results, the use of e-billing positively affects the increase in taxpayer compliance. This system not only simplifies the payment process for the Annual Tax Return (SPT) but also raises taxpayer awareness about the importance of making timely payments. Taxpayers are familiar with e-billing, and the system's convenience contributes significantly to higher overall taxpayer compliance rates.

This study aligns with findings presented by Sari (2021) and Daeng (2021), who also found that the e-Billing system has a significant positive impact on taxpayer compliance. This indicates consistency in research results in this field, further strengthening the argument that innovations in the tax system can contribute significantly to enhancing awareness and tax compliance.

b. The Impact of System Quality (X_2) on Taxpayer Compliance (Y)

According to the second hypothesis (H2), it is accepted that this study shows that system quality has a positive and significant impact on taxpayer compliance, with a significance value of 0.018 (which is less than 0.05). This means that the quality of the system used to pay taxes affects taxpayer compliance. A good tax system allows taxpayers to make payments quickly, accurately, and accessibly, thus supporting an increase in taxpayer compliance.

The research results indicate that system quality not only facilitates the reporting and payment processes for the Annual Tax Return (SPT) but also enhances taxpayer awareness of the importance of making timely tax payments. Many taxpayers are familiar with and use quality systems, and the

convenience and dependability these systems provide are key factors in raising overall taxpayer compliance rates.

Previous research by Asidiqi (2019) also found that system quality influences taxpayer compliance. Asidiqi's study emphasizes that elements of system quality, such as data integrity, user-friendliness, and responsiveness to user needs, are crucial in encouraging taxpayers to comply more. Additionally, the research conducted by Utami (2021) found that the quality of the tax system positively and significantly affects tax compliance.

c. The Impact of Tax Sanctions (X_3) on Taxpayer Compliance (Y)

With a significance value of 0.034 (below the 0.05 threshold), the study supports the third hypothesis (H3), which is accepted and indicates that tax sanctions have a positive and significant effect on taxpayer compliance. This suggests that taxpayer compliance is influenced by the tax system's application of penalties. Strict tax penalties, including criminal and administrative fines, encourage taxpayers to comply with regulations and fulfill their obligations on time.

The research results indicate that tax sanctions serve not only as a law enforcement tool but also enhance taxpayer awareness of the importance of adhering to tax regulations. The consistent and fair application of sanctions is well recognized among taxpayers, and the deterrent effect of these sanctions plays a crucial role in improving overall tax compliance.

Research by Siamena (2022) also found that tax sanctions have a positive and significant impact on tax compliance. Additionally, Prastowo (2022) demonstrated that tax sanctions positively and significantly influence tax compliance. However, this study does not align with earlier research by Kurniawan (2023), which stated that tax sanctions do not significantly affect individual taxpayer compliance.

5. Conclusion

5.1. Conclusion

This study demonstrates that the e-billing system, the quality of the tax system, and tax sanctions all have a positive and significant impact on taxpayer compliance. The e-billing system simplifies tax payments, increases awareness, and encourages compliance. High-quality systems facilitate more efficient reporting, while tax sanctions serve as reminders and enforcement mechanisms that collectively enhance taxpayer compliance. These findings concur with a number of earlier research, which indicate that innovations in systems and the implementation of fair sanctions promote higher levels of compliance.

5.2. Limitation

This study has several limitations, including its focus on only three variables and a relatively small sample size of just 100 respondents, as well as its limited focus on taxpayers in Jepara. These factors may reduce the ability to generalize the findings to other regions or broader populations. Therefore, further research with a larger sample size and more varied coverage is needed to obtain more comprehensive and widely applicable findings.

5.3. Suggestion

For future research, the study scope should be expanded to generate more comprehensive findings. Researchers are also advised to include additional variables that have not yet been explored, such as the e-filing tax system and e-SPT. This step aims to enable more accurate analysis and provide deeper insights into the factors that influence taxpayer compliance.

Acknowledgments

To everyone who helped to complete this research, the author would like to thank you. I would like to thank the Nahdlatul Ulama Islamic University of Jepara for their support, which made this research possible. Additionally, I am grateful to Mrs. Subadriyah, S.E., M.Si., my advisor, for her invaluable guidance and assistance throughout the research process. Her focus and motivation were

crucial in determining the direction of this study. The author also extends heartfelt thanks to family and friends for their unwavering moral support and understanding during this research journey, as well as for their constructive criticism and collaboration throughout the study.

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