

# The Influence of Tax Understanding, Tax Rates and Tax Sanctions on Taxpayer Compliance in E-Commerce Actors in Luwuk City, Southeast Sulawesi

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**Abstract:** This study aims to analyze the effect of tax understanding, tax rates, and tax sanctions on taxpayer compliance on e-commerce actors in Luwuk City. The results show that all independent variables, namely tax understanding, tax rates, and tax sanctions, have a positive and significant effect on taxpayer compliance. Tax rates have the most dominant influence with a coefficient of 0.434, followed by tax sanctions of 0.317, and tax understanding of 0.176. This research model has an R-Square value of 0.551, which indicates that 55.1% of the variance in taxpayer compliance can be explained by these three variables. These findings indicate that reasonable tax rates, adequate tax education, and consistent application of sanctions can increase taxpayer compliance in the e-commerce sector.

**Keywords:** Taxpayer Compliance, Tax Rates, Tax Sanctions, E-Commerce

## 1. INTRODUCTION

The rapid growth of e-commerce in Indonesia, driven by increasing internet penetration and changing consumer preferences, has significantly changed trade and consumption patterns in society (Cokorda Gede Budha Hary Baskara , 2024) . However, this expansion presents major challenges, especially in the area of taxation. Effective e-commerce taxation is essential to ensure fair competition and generate government revenue, but the lack of clear regulations and enforcement mechanisms has led to problems such as tax evasion and low taxpayer compliance ( Pasu Sibarani , 2024) ( Siska Siska , 2024) . Taxpayer compliance is hampered by factors such as lack of awareness and education regarding tax obligations, as well as inadequate quality of tax services (Loso Judijanto , 2024) . Furthermore, tax authorities face difficulties in managing e-commerce taxation due to limited resources and expertise (Endang Mahpudin , 2024) . Addressing these challenges is critical to sustaining the growth of the digital economy and ensuring that online businesses contribute their fair share to national income (Cokorda Gede Budha Hary Baskara , 2024) (Endang Mahpudin , 2024) .

Tax compliance is essential to maintain state revenues and support development financing, especially in the e-commerce sector. However, this sector faces significant challenges due to the complexity of tax regulations and low levels of taxpayer understanding, which can lead to negative perceptions of tax rates and fear of sanctions (

Pasu Sibarani , 2024) . The unique characteristics of digital transactions, such as anonymity, diverse platforms, and easy cross-border access, complicate tax authority supervision and law enforcement efforts ( Jasmine Tinta , 2024) ( Helwa Syazwana Azkya , 2024) . These factors contribute to revenue losses and hinder effective tax compliance ( Jasmine Tinta , 2024) . To address these issues, improving taxpayer education is essential, as it can improve understanding of tax obligations and filing procedures, ultimately increasing compliance and revenue ( Shafaa Sekar Pembayun Ananureko , 2024) . Without an effective strategy to navigate these challenges, the sustainability of state revenues in the digital economy remains at risk (Cokorda Gede Budha Hary Baskara , 2024) .

Tax compliance in e-commerce is significantly influenced by several interrelated factors, including tax literacy, perception of fair tax rates, and the effectiveness of tax sanctions. Lack of tax literacy among business operators creates uncertainty regarding tax obligations, which can lead to unintentional non-compliance and ultimately reduce state revenues ( Pujo Gunarso , 2024) . Furthermore, when tax rates are perceived as unfair or burdensome, this can exacerbate tax evasion behavior ( Chelsea Anggriawan , 2024) . In addition, the effectiveness of tax sanctions plays an important role; if sanctions are not tailored to the unique characteristics of the digital sector, they may fail to encourage compliance ( Helwa Syazwana Azkya , 2024) .

By addressing these challenges, this study will provide strategic recommendations for tax authorities to improve the level of compliance in this sector. Understanding the interaction between taxpayer compliance and perceptions of tax system fairness is essential to developing effective strategies ( Helwa Syazwana Azkya , 2024) . Ultimately, this empirical overview will contribute to a more efficient tax framework for e-commerce in Indonesia ( Mei Welensya Br Simatupang , 2023) .

## **2. LITERATURE REVIEW**

### ***Tax Understanding and Compliance Behavior***

Understanding taxation is essential to improving taxpayer compliance, as it includes knowledge of tax obligations, reporting procedures, and payment processes. Taxpayer compliance is significantly influenced by an individual's understanding of these elements, which is in line with the Theory of Reasoned Action, suggesting that understanding shapes attitudes toward compliance actions ( Zanele Matshona , 2024) ( Smart A.Sarpong , 2024) . Tax literacy, which includes awareness of tax rates, deductions, and filing requirements,

empowers taxpayers to navigate the complexities of the tax system effectively, thereby reducing errors and promoting compliance with tax laws ( Fathiya Syahidah Nasution , 2024) . Timely and accurate tax payments are also important, as they strengthen public trust and contribute to government revenue ( Della Fadhilatunisa , 2024) . Overall, a comprehensive understanding of taxation fosters a positive attitude towards compliance, which ultimately leads to a higher level of taxpayer compliance with regulations ( Zanele Matshona , 2024) ( Fathiya Syahidah Nasution , 2024) .

### ***Tax Rates and Taxpayer Compliance***

Tax rates are an important factor influencing taxpayer compliance, as highlighted by the Optimal Tax Theory, which emphasizes the need for tax rates to be structured to minimize taxpayer burdens and prevent tax avoidance and evasion (Loso Judijanto , 2024) . High tax rates can lead to non-compliance, as they can incentivize taxpayers to engage in tax evasion, which undermines trust in the tax system and results in significant revenue losses (Asri Ady Bakri , 2024) ( M<sup>a</sup> Gabriela Lagos Rodríguez , 2022) .

In the realm of e-commerce, perceptions of tax fairness are critical, especially for small businesses that operate on thin profit margins. Research by Yulianti and Ahmad (2022) shows that these businesses often view the tax rates imposed on them as unfair, especially when compared to conventional businesses. This sentiment is intensified by the different tax treatments between digital and traditional business operators, which can lead to feelings of unfairness and reduce trust in the tax system ( Abiola Okunola , 2023) ( I Nyoman Darmayasa , 2022) .

### ***Tax Sanctions as a Law Enforcement Instrument***

Tax sanctions are designed to ensure taxpayer compliance through a deterrent effect . Deterrence Theory, as articulated by Becker in 1968, emphasizes that the threat of strong and proportionate sanctions can effectively reduce taxpayers' intention to commit violations. This dissuasive effect is achieved through general and specific deterrence mechanisms. General deterrence operates by publicizing the consequences of non-compliance, thereby influencing potential violators in general ( David M. Kennedy , 2008) . Specific deterrence, on the other hand, targets individuals who have already committed violations, aiming to prevent recidivism through specific sanctions ( Carolyn Abbot , 2009) . The effectiveness of this deterrent strategy is further enhanced by the certainty of punishment, which increases the likelihood of detection and enforcement ( Siti Normala Sheikh Obid , 2004) .

### ***Taxation Context in E-Commerce***

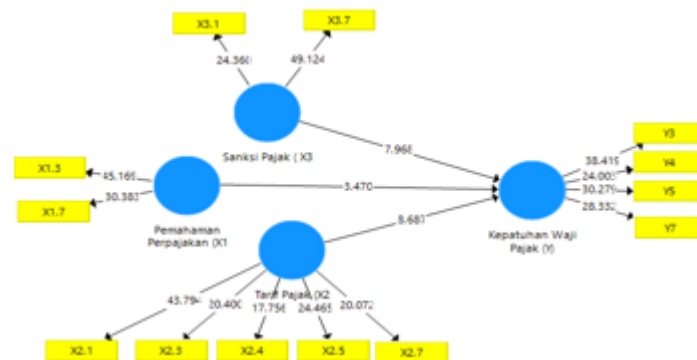
E-commerce presents unique challenges in tax management due to its characteristics, such as transaction anonymity and location flexibility, which make it difficult to identify tax bases and rates (Alexander Szívós , 2024) . The cross-border nature of online businesses further exacerbates these challenges, leading to significant problems with tax evasion as companies exploit differing tax laws across jurisdictions ( Paulius Čerka , 2024) . To address these complexities, international cooperation is essential, allowing countries to collaborate on tax policies and share information effectively (Jingyi Wang , 2024) . One proposed solution is the implementation of a digital transaction tax, which aims to generate revenue from online sales while addressing the problem of tax evasion ( Joseph Kuba Nembe , 2024) .

In Indonesia, the implementation of e-commerce taxation is still developing, with recent policies mandating tax collection obligations for digital platforms to improve compliance ( Muhammad Abdul Rosyid , 2024) . However, research shows that a significant barrier to effective compliance is the lack of education and socialization among digital business actors ( Pasu Sibarani , 2024) ( Pujo Gunarso , 2024) .

### **3. RESEARCH METHODS**

This study uses a Quantitative Approach, with the associative method this approach is used because the study aims to measure the influence of independent variables (tax understanding, tax rates, and tax sanctions) on the dependent variable (taxpayer compliance) objectively and measurably. Population All e-commerce actors registered or active in the city of Luwuk, The sample in this study were e-commerce actors taken using purposive sampling techniques , namely those who have direct experience in reporting and paying e-commerce taxes. The sample size can be determined based on the Slovin formula. The variables used in this study are, Independent Variables: Tax Understanding (X1), Tax Rates (X2), Tax Sanctions (X3) Dependent Variable: Taxpayer Compliance (Y):

#### 4. RESULTS AND DISCUSSION



**Figure 1.** Research Model

##### Evaluation of Measurement Model

##### a. Outer Loading

**Table 1.** Outer Loading

	Taxpayer Compliance (Y)	Understanding Taxation (X1)	Tax Penalty (X3)	Tax Rate (X2)
<b>X1.3</b>		<b>0.870</b>		
<b>X1.7</b>		<b>0.832</b>		
<b>X2.1</b>				<b>0.808</b>
<b>X2.3</b>				<b>0.704</b>
<b>X2.4</b>				<b>0.705</b>
<b>X2.5</b>				<b>0.750</b>
<b>X2.7</b>				<b>0.709</b>
<b>X3.1</b>			<b>0.790</b>	
<b>X3.7</b>			<b>0.879</b>	
<b>Y3</b>	<b>0.784</b>			
<b>Y4</b>	<b>0.761</b>			
<b>Y5</b>	<b>0.769</b>			
<b>Y7</b>	<b>0.768</b>			

##### Interpretation

All indicators have outer loading values above 0.70, which indicates that convergent validity is met. Latent constructs (Y, X1, X2, and X3) have been well represented by their indicators. Thus, the indicators in this study are as if continued.

##### b. Composite Reliability

**Table 2.** Construct Reliability & Validity

	Cronbach's Alpha	rho_A	Composite Reliability
<b>Taxpayer Compliance (Y)</b>	<b>0.772</b>	<b>0.773</b>	<b>0.854</b>

<b>Understanding Taxation (X1)</b>	<b>0.763</b>	<b>0.763</b>	<b>0.840</b>
<b>Tax Penalty (X3)</b>	<b>0.737</b>	<b>0.760</b>	<b>0.822</b>
<b>Tax Rate (X2)</b>	<b>0.788</b>	<b>0.792</b>	<b>0.855</b>

#### Interpretation

##### 1) Cronbach's Alpha

Values above 0.70 are considered adequate, while values above 0.80 indicate very good reliability. Taxpayer Compliance (Y): 0.772, Good internal reliability, with a value above the minimum threshold (0.70). Tax Understanding (X1): 0.763, This construct also shows good internal reliability. Tax Sanctions (X3): 0.737, Adequate internal reliability, although closer to the lower limit (0.70). Tax Rates (X2): 0.788, Good internal reliability. Overall, all constructs have adequate Cronbach's Alpha values.

##### 2) rho\_A

rho\_A is an alternative reliability estimate that also measures internal reliability. Values above 0.70 are considered adequate. Taxpayer Compliance (Y ): 0.773, Meets internal reliability criteria. Tax Understanding (X1): 0.763, This construct is also valid in terms of reliability. Tax Sanctions (X3): 0.760, Adequate rho\_A value. Tax Rates (X2): 0.792, Has good internal reliability.

##### 3) Composite Reliability

Values above 0.70 are considered adequate, while values above 0.80 are considered excellent. Taxpayer Compliance (Y): 0.854, Very good, indicating high construct reliability. Tax Understanding (X1 ): 0.840, Very good, indicating a strong indicator contribution to the construct. Tax Sanctions (X3): 0.822, Good construct reliability. Tax Rates (X2): 0.855, Very good, with consistent indicator contribution.

#### c. AVE Value

**Table 3.** AVE values

	<b>Average Variance Extracted (AVE)</b>
<b>Taxpayer Compliance (Y)</b>	<b>0.594</b>
<b>Understanding Taxation (X1)</b>	<b>0.724</b>
<b>Tax Penalty (X3)</b>	<b>0.698</b>
<b>Tax Rate (X2)</b>	<b>0.542</b>

## Interpretation

### 1) Taxpayer Compliance (Y)

AVE value: 0.594, This construct meets the criteria of convergent validity because the AVE value is  $> 0.50$ . This means that more than 59.4% of the indicator variance can be explained by the Taxpayer Compliance construct.

### 2) Understanding Taxation (X1)

AVE value: 0.724, This construct has very good convergent validity, because the AVE value is far above 0.50. This means that 72.4% of the indicator variance can be explained by the Tax Understanding construct.

### 3) Tax Penalties (X3)

AVE value: 0.698, The convergent validity of this construct is also very good. As much as 69.8% of the indicator variance can be explained by the Tax Sanction construct.

### 4) Tax Rate (X2)

AVE value: 0.542, This construct meets the criteria for convergent validity, with 54.2% of the indicator variance explained by the Tax Rate construct. Although it meets the criteria, this value is relatively close to the minimum limit (0.50).

## Structural Model Evaluation

### a. Inner VIF

**Table 4. Inner VIF**

	<b>Taxpayer Compliance (Y)</b>	<b>Understanding Taxation (X1)</b>	<b>Tax Penalty (X3)</b>	<b>Tax Rate (X2)</b>
<b>Taxpayer Compliance (Y)</b>				
<b>Understanding Taxation (X1)</b>	<b>1,395</b>			
<b>Tax Penalty (X3)</b>	<b>1,248</b>			
<b>Tax Rate (X2)</b>	<b>1,481</b>			

## Interpretation

### 1) Understanding Taxation (X1)

VIF value: 1.395, ( $< 5$ ) indicates that there is no multicollinearity between Tax Understanding (X1) and other independent variables.

### 2) Tax Penalty (X3)

VIF value: 1.248, (VIF value  $< 5$ ), indicates that there is no multicollinearity between Tax Sanctions (X3) and other independent variables.

3) Tax Rate (X2)

VIF value : 1.481, (VIF value < 5), indicates there is no multicollinearity between Tax Rates (X2) and other independent variables.

b. Significance of Path Coefficient

**Table 5.** Path Coefficient

	<b>Original Sample (O)</b>	<b>Sample Mean (M)</b>	<b>Standard Deviation (STDEV)</b>	<b>T Statistics ( O/STDEV )</b>	<b>P Values</b>
<b>Tax Understanding (X1) -&gt; Taxpayer Compliance (Y)</b>	0.176	0.174	0.051	3,470	<b>0.001</b>
<b>Tax Sanctions (X3) -&gt; Taxpayer Compliance (Y)</b>	0.317	0.318	0.040	7,968	<b>0,000</b>
<b>Tax Rate (X2) -&gt; Taxpayer Compliance (Y)</b>	0.434	0.436	0.050	8,687	<b>0,000</b>

Interpretation

1) Understanding of Taxation (X1) Towards Taxpayer Compliance (Y)

Original Sample (O): 0.176, Positive relationship. An increase in Tax Understanding by 1 unit will increase Taxpayer Compliance by 0.176. T Statistics (|O/STDEV|): 3.470, T value > 1.96 (for significance at the 5% level), indicating this relationship is significant. P Values: 0.001, P-value < 0.05, confirms that the relationship between Tax Understanding and Taxpayer Compliance is statistically significant.

2) Tax Sanctions (X3) Against Taxpayer Compliance (Y)

Original Sample (O): 0.317, Positive relationship. Increasing Tax Sanctions by 1 unit will increase Taxpayer Compliance by 0.317. T Statistics (|O/STDEV|): 7.968, The T value is far above 1.96, indicating that this relationship is very significant. P Values: 0.000, P-value < 0.05, confirms that this relationship is very statistically significant.

3) Tax Rates (X2) Against Taxpayer Compliance (Y)

Original Sample (O): 0.434, Positive relationship. An increase in Tax Rate by 1 unit will increase Taxpayer Compliance by 0.434. T Statistics (|O/STDEV|): 8.687, The T value is very high, indicating that this relationship is very significant. P Values: 0.000, P-value < 0.05, confirms that this relationship is statistically significant.



## Evaluation of Goodness of Fit &amp; Model Suitability

## a. RSquare

**Table 6.** R Square

	<b>R Square</b>	<b>R Square Adjusted</b>
<b>Taxpayer Compliance (Y)</b>	0.551	0.547

## Interpretation

$R^2$  value: 0.551, the model can explain 55.1% of the variance of the Taxpayer Compliance construct (Y) based on the independent variables (Tax Understanding, Tax Sanctions, and Tax Rates). The remaining 44.9% is explained by other factors not included in the model.

**5. CONCLUSION**

## a. Understanding Taxation (X1)

The results of the study indicate that Tax Understanding has a positive and significant influence on Taxpayer Compliance with a coefficient of 0.176 and a p-value of 0.001. This indicates that the higher the understanding of e-commerce actors towards tax regulations, the higher their level of compliance.

## b. Tax Rate (X2)

Tax Rates have the strongest positive influence on Taxpayer Compliance with a coefficient of 0.434 and a p-value of 0.000. This shows that the level of taxpayer compliance is greatly influenced by their perception of the tax rates imposed, where fair and transparent rates encourage higher compliance.

## c. Tax Penalty (X3)

Tax sanctions also have a positive and significant effect on Taxpayer Compliance, with a coefficient of 0.317 and a p-value of 0.000. These results indicate that the existence of strict and consistently applied tax sanctions can increase e-commerce actors' compliance with tax obligations.

This study concludes that Tax Understanding, Tax Rates, and Tax Sanctions have a positive and significant influence on Taxpayer Compliance in e-commerce actors in Luwuk City. Tax rates are the factor that has the most dominant influence. Therefore, tax strategies that focus on rate transparency, taxpayer education, and sanction enforcement can significantly increase tax compliance in the e-commerce sector.

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