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Research Article

Examining Factors Affecting Presumptive Tax Voluntary Compliance (A Case Study in Gedeo Zone)

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Abstract

This research study aimed to analyze the factors influencing presumptive tax voluntary compliance in Gedeo Zone. The dependent variable, presumptive tax voluntary compliance, was examined in relation to various independent variables including collection enforcement, tax evasion, taxpayers' awareness, existence of corruption, tax incentives, transparency and fairness, and a supportive tax environment. A positivism research philosophy was adopted, utilizing a quantitative research approach and a cross-sectional research design. Primary data was collected through a Likert scale questionnaire from 318 targeted category "C" taxpayers. The findings of the ordered logistic regression indicated that collection enforcement, taxpayers' awareness, tax incentives, transparency and fairness, and a supportive tax environment have a statistically significant and positive influence on presumptive tax voluntary compliance in Gedeo Zone. Conversely, tax evasion and the existence of corruption were found to have a negative and statistically significant impact on taxpayers' compliance with presumptive tax. In conclusion, this study highlights the importance of implementing effective collection enforcement mechanisms, enhancing taxpayers' awareness programs, tax incentives, promoting transparency and fairness, and creating a supportive tax environment to enhance presumptive tax voluntary compliance. Furthermore, efforts should be made to tackle tax evasion and address issues related to corruption in order to improve compliance rates. The results of this study will aid policymakers and tax administrators in formulating strategies to enhance presumptive tax compliance in Gedeo Zone and potentially inform similar tax systems in other regions.

Keywords

Presumptive Tax, Voluntary Compliance, Collection Enforcement, Tax Evasion, Taxpayers' Awareness, Corruption, Tax Incentives, Supportive Tax Environment

1. Introduction

Presumptive tax, also known as simplified taxation, is a method implemented by many countries, including Ethiopia, to facilitate tax collection from small business enterprises that may lack the resources or capacity to maintain detailed accounting systems. In Ethiopia, the presumptive tax system was introduced in 2002 as part of the government's effort to broaden the tax base and increase revenue. Under this system, eligible business entities are taxed based on subjective assessment of their income, turnover, or other factors instead of maintaining detailed financial records. Presumptive tax voluntary compliance is the extent to which eligible businesses willingly pay their taxes without being subject to enforcement

measures. Understanding the factors affecting voluntary compliance is crucial for improving tax collection efficiency and reducing the tax gap in developing countries, particularly in Africa. However, there is limited research examining the specific determinants of presumptive tax voluntary compliance in Africa, Ethiopia, and the Gedeo Zone.

In Africa, studies on tax compliance have mostly focused on the formal sector, neglecting the unique challenges faced by SMEs. Furthermore, research on presumptive tax voluntary compliance is sparse. Recent studies have shown that factors such as taxpayer awareness, corruption, tax incentives, and enforcement play a significant role in shaping tax compliance behavior [17-20]. However, these studies have not sufficiently explored their interplay and impact on presumptive tax voluntary compliance among SMEs in the African context.

Ethiopia is facing difficult in collecting tax from category 'C' which administered through Presumptive taxation. Category 'C' taxpayers in Ethiopia refer to the group of small business enterprises that have an annual turnover between 100,001 Ethiopian Birr (ETB) and 400,000 ETB or less 500, 000 Ethiopian Birr. Category 'C' taxpayers in Ethiopia are primarily comprised of small businesses and informal sector workers, who often operate in the unregistered and cash-based economy. Usually they are named as hard to tax business because they frequently evade taxes due to the lack of proper record-keeping, difficulties in monitoring their financial transactions, and limited awareness of their tax obligations. The Ethiopian Revenue and Customs Authority (ERCA) has been facing significant challenges in imposing taxes on category 'C' taxpayers, which has resulted in a significant tax gap and reduced revenue collection for the government [1, 2].

In Ethiopia, existing research on tax compliance has mainly concentrated on the formal sector and large corporations, neglecting the SMEs that contribute significantly to the country's economy [11-15]. Moreover, most studies have focused on factors affecting income tax compliance based on Category 'A' and 'Taxpayers rather than presumptive tax voluntary compliance of Category 'C' taxpayers in Ethiopia. This research gap highlights the need to explore the determinants of presumptive tax voluntary compliance among SMEs in Ethiopia.

Within Ethiopia, the Gedeo Zone offers an interesting context for studying presumptive tax voluntary compliance. The Gedeo Zone, located in the Southern Ethiopian Region, is known for its significant agricultural activities, including coffee farming, and a thriving informal economy. However, limited research works has been conducted on factors affecting presumptive tax voluntary compliance of Category 'C' taxpayers specifically in this zone. The unique socio-economic dynamics and characteristics of the Gedeo Zone, coupled with its contribution to Ethiopia's national economy, create an opportunity to examine the factors affecting presumptive tax voluntary compliance in this particular context.

Overall, the existing literature on presumptive tax voluntary compliance in Africa, Ethiopia, and the Gedeo Zone is limited in its scope and specificity. The gaps in research highlight the need to dig deeper and explore the interplay of factors such as collection enforcement, tax evasion, taxpayers' awareness, existence of corruption, tax incentives, transparency and fairness, and a supportive tax environment. This research aims to address these gaps by conducting a comprehensive study on the determinants of presumptive tax voluntary compliance in the Gedeo Zone of Ethiopia.

Research objectives

General Objective:

To examine the factors affecting presumptive tax voluntary compliance in Gedeo Zone.

Research Specific Objectives:

1. To assess the influence of collection enforcement on presumptive tax voluntary compliance in Gedeo Zone.
2. To examine the relationship between tax evasion and presumptive tax voluntary compliance in Gedeo Zone.
3. To analyze the impact of taxpayers' awareness on presumptive tax voluntary compliance in Gedeo Zone.
4. To investigate the role of corruption on presumptive tax voluntary compliance in Gedeo Zone.
5. To assess the effectiveness of tax incentives in promoting presumptive tax voluntary compliance in Gedeo Zone.
6. To analyze the influence of transparency and fairness on presumptive tax voluntary compliance in Gedeo Zone.
7. To explore the role of a supportive tax environment in promoting presumptive tax voluntary compliance in Gedeo Zone.

2. Literature Review

2.1. Categories of Taxpayers in Ethiopia

According to the Income Tax Proclamation 979/2026 in Ethiopia, taxpayers are categorized into three main groups:

Category A taxpayers:

These include bodies or individuals with an annual gross income of ETB 1,000,000 or more.

Category B taxpayers:

Individuals (excluding bodies) fall into this category if their annual gross income is between ETB 500,000 and ETB 1,000,000.

Category C taxpayers:

This group comprises individuals (excluding bodies) with an annual gross income less than ETB 500, 000. Therefore, if annual turnover income is below 100,000 Ethiopian Birr, you would fall under the Category C taxpayer classification. This study was focused on category C taxpayer operating in Gedeo zone.

2.2. Concept of Presumptive Tax Voluntary Compliance

The concept of presumptive tax voluntary compliance refers to a tax system in which taxpayers are given the option to voluntarily pay taxes based on an assumed income or profit level, rather than providing detailed financial records to determine the precise amount. This system seeks to simplify taxation processes for small businesses and informal sector workers who often lack the capacity or resources to maintain proper financial records. By allowing taxpayers to make a voluntary payment based on an estimated income, it aims to encourage compliance through a less burdensome reporting requirement.

2.3. Theories of Presumptive Tax Voluntary Compliance

2.3.1. Economic Perspective Theory

This theory suggests that individuals comply with taxes when the perceived benefits of compliance outweigh the costs. It emphasizes economic incentives and the rational decision-making process of taxpayers. The theory posits that taxpayers are more likely to comply if they perceive a high probability of detection and enforcement, believe that others are also paying their taxes, and have confidence in the fairness of the tax system. This theory is supported by [6] classic study on income tax evasion.

2.3.2. Social Norms Theory

According to this theory, individuals' compliance with taxes is largely influenced by social norms and perceived societal expectations. It argues that people tend to conform to established norms and feel obliged to comply with tax laws to maintain their reputation and avoid social disapproval. The theory draws upon the work of [13] who highlights the importance of social norms in determining voluntary tax compliance.

2.3.3. Institutional Theory

This theory focuses on the role of formal and informal institutions in shaping taxpayer behavior and compliance. It asserts that individuals comply with taxes due to their trust in the legal and administrative institutions responsible for tax collection. The theory suggests that a transparent and accountable tax administration, along with a strong rule of law, can enhance voluntary compliance. Study of [10] provides empirical evidence on the impact of institutions on tax compliance in their study.

2.3.4. Psychological Perspective Theory

This theory examines the psychological factors driving tax compliance, such as individuals' attitudes, beliefs, and moral reasoning [36]. It argues that taxpayers' internal motivations, such as their sense of duty or fairness, play a crucial role in shaping their compliance behavior. The theory draws upon the work of [3, 4] who explores the psychological foundations of tax compliance.

2.3.5. Public Goods Theory

This theory argues that individuals comply with taxes due to their understanding of the collective benefits that tax revenue can provide in terms of public goods and services. It suggests that individuals comply more willingly when they perceive a close connection between tax payment and public goods provision. A study by [24] provides empirical evidence supporting the role of public goods in promoting tax compliance.

2.4. Empirical Review

2.4.1. Collection Enforcement and Presumptive Tax Voluntary Compliance

According to [2, 23] a strong and effective tax collection enforcement mechanism can greatly influence presumptive tax voluntary compliance. Research has shown that increased enforcement activities, such as improved audit coverage and strict penalties for non-compliance, can enhance taxpayers' perception of the risk of non-compliance and subsequently increase their willingness to voluntarily comply with presumptive tax obligations. This relationship is supported by the deterrence theory of tax compliance, which suggests that individuals are more likely to comply with tax obligations when they perceive a higher risk of detection and punishment for non-compliance.

H1: Collection Enforcement has positive effect on Presumptive Tax Voluntary Compliance

2.4.2. Tax Evasion and Presumptive Tax Voluntary Compliance

The extent of tax evasion within a jurisdiction can have a negative relationship with presumptive tax voluntary compliance. Empirical studies have consistently found that higher levels of tax evasion, measured by the size of the informal economy or the extent of underreporting, are associated with lower levels of voluntary tax compliance. This relationship can be explained by the normative aspects of tax compliance theory, which argue that individuals' compliance behavior is influenced by their perception of the fairness and equity of the tax system. When taxpayers perceive that others are evading taxes without consequences, it can erode their motivation to voluntarily comply with presumptive tax obligations [12-34].

H2: Tax evasion has negative effect on Presumptive Tax Voluntary Compliance

2.4.3. Taxpayers' Awareness and Presumptive Tax Voluntary Compliance

The level of taxpayers' awareness and understanding of presumptive tax obligations and their purpose can positively influence voluntary compliance. Research has shown that when taxpayers are adequately informed about their tax obligations, the potential benefits of compliance, and the negative consequences of non-compliance, they are more likely to voluntarily comply. This relationship is consistent with the theory of reasoned action, which asserts that individuals' compliance behavior is strongly influenced by their attitudes, subjective norms, and perceived behavioral control regarding tax obligations [30-36].

H3: Taxpayers' awareness has positive effect on Presumptive Tax Voluntary Compliance

2.4.4. Existence of Corruption and Presumptive Tax Voluntary Compliance

The presence of corruption within the tax administration system can have a detrimental impact on presumptive tax voluntary compliance. Empirical evidence suggests that when taxpayers perceive corruption among tax officials, such as bribery or favoritism, it undermines their trust in the fairness and integrity of the tax system. This distrust can significantly reduce their willingness to voluntarily comply with presumptive tax obligations. The social contract theory of tax compliance argues that taxpayers' perception of the fairness and legitimacy of the tax system is crucial for voluntary compliance [5-14].

H4: Presence of corruption has negative effect on Presumptive Tax Voluntary Compliance

2.4.5. Tax Incentives: And Presumptive Tax Voluntary Compliance

The availability of tax incentives, such as deductions or exemptions, can positively influence presumptive tax voluntary compliance. Studies have shown that when taxpayers perceive that the tax system provides attractive benefits, rewards, or opportunities for reducing their tax liabilities through legitimate means, they are more likely to voluntarily comply. This relationship is in line with the economic theory of tax compliance, which suggests that individuals' compliance decisions are influenced by the perceived costs and benefits of complying with tax obligations [6-10].

H5: The availability of tax incentives has positive effect on Presumptive Tax Voluntary Compliance

2.4.6. Transparency and Fairness and Presumptive Tax Voluntary Compliance

The degree of transparency and fairness in the administration of presumptive tax can significantly impact voluntary compliance. Research has indicated that when taxpayers perceive that the tax system is transparent, with clear rules and

procedures, and that tax officials treat taxpayers fairly and equitably, it enhances their trust and confidence in the tax system. This increased trust and confidence can positively influence their voluntary compliance behavior. This relationship is supported by the trust-oriented theory of tax compliance, which emphasizes the importance of trust and confidence in tax authorities as key drivers of compliance behavior [3-5].

H6: Transparency and Fairness has positive effect on Presumptive Tax Voluntary Compliance

2.4.7. Supportive Tax Environment and Presumptive Tax Voluntary Compliance

A supportive tax environment, characterized by the provision of taxpayer assistance services, simplified tax procedures, and effective communication channels between tax authorities and taxpayers, can positively impact presumptive tax voluntary compliance. Empirical studies have consistently found that when taxpayers perceive that the tax administration is responsive to their needs and concerns, and provides them with the necessary support and guidance, it increases their motivation to voluntarily comply with presumptive tax obligations. This relationship is consistent with the social exchange theory of tax compliance, which posits that taxpayers' compliance behavior is influenced by the perceived quality of the relationship and interaction between taxpayers and tax authorities [2-10].

H7: Supportive Tax Environment has positive effect on Presumptive Tax Voluntary Compliance

2.5. Conceptual Model

The conceptual framework aims to explore the relationship between Presumptive Tax Voluntary Compliance (dependent variable) and various factors affecting it (independent variables). Collection Enforcement is expected to have a positive effect on voluntary compliance, as stricter collection measures may encourage taxpayers to adhere to their tax obligations to avoid penalties. Tax Evasion is anticipated to have a negative relationship with voluntary compliance, as the presence of tax evaders might undermine the willingness of compliant taxpayers to fulfill their obligations. Taxpayers' awareness is expected to positively influence compliance, as informed taxpayers are more likely to understand the importance of fulfilling their tax obligations. The existence of Corruption is expected to have a negative relationship with voluntary compliance, as corruption may enable tax evasion and diminish trust in the tax system. Tax incentives are predicted to have a positive association with voluntary compliance, as the provision of incentives may motivate taxpayers to comply voluntarily. Transparency and fairness are anticipated to positively influence compliance, as a transparent and fair tax system enhances trust and reduces the likelihood of non-compliance. Finally, a supportive tax environment, characterized by favorable policies, efficient tax administra-

tion, and simplified procedures, is expected to have a positive relationship with voluntary compliance, as it creates an enabling environment for taxpayers to fulfill their obligations willingly.
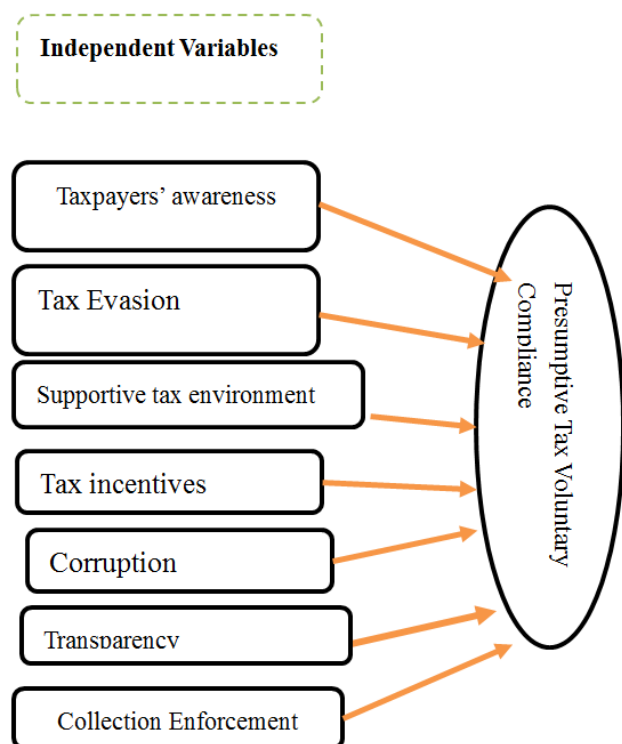

Figure 1. *Conceptual framework of the study.*

3. Materials and Methods

3.1. Research Philosophy

For this study, a positivist research philosophy will be adopted. Positivism aims to discover and explain facts through systematic observation and experimentation. It emphasizes objectivity, causality, and the use of empirical evidence to develop theories. By adopting this research philosophy, the study seeks to provide an objective understanding of factors affecting presumptive tax voluntary compliance in Gedeo Zone.

3.2. Research Approach

A quantitative research approach was employed in this study. This approach involves the collection and analysis of numerical data to provide a statistical understanding of the variables under investigation. By using a quantitative approach, the study aims to generate generalizable findings and facilitate the identification of patterns and relationships among the independent and dependent variables.

3.3. Research Design

A cross-sectional research design was utilized. This design involves the collection of data from a specific population at a single point in time. By conducting the study in a cross-sectional manner, it would be possible to analyze the relationship between the independent variables (collection enforcement, tax evasion, taxpayers' awareness, existence of corruption, tax incentives, transparency and fairness, and supportive tax environment) and the dependent variable (presumptive tax voluntary compliance) within a specific time frame in Gedeo Zone.

3.4. Data Sources

The primary data source for this study were surveys administered to the 319 category 'C' taxpayers in Gedeo Zone. Additionally, secondary data sources such as government reports, official documents, and academic literature were consulted to complement the survey data and provide a comprehensive analysis of the research topic.

3.5. Sampling Design

The target population of this study is 1,570 category 'C' taxpayers in Gedeo Zone. The researchers used simple random sampling technique to select 319 taxpayers. To determine the sample size, the researchers used the formula developed by Yamane (1967) to estimate the representative sample from the taxpayers. Thus, the total sample is 319. Since the number of population in each sample would not be the same, there are a need to proportionate this for each business sectors and will be calculated using the probability proportional to size determination formula as follows:

$$n = n_i N_i / N$$

For this study a sample size of n is 319 to be drawn from a population of size N is 1, 570 which is divided into four strata of agricultural sector is 280, manufacturing sector is 100, service sector is 720 and Others (wholesale trade, retailer mining and etc..) is 470.

The sample size for agricultural sector =280,
$$n_1 = 319(280/1570) = 56$$

The sample size for manufacturing sector =100,
$$n_2 = 319(100/1570) = 20$$

The sample size for service sector=720,
$$n_3 = 319(720/1570) = 147$$

The sample size for others = 470, $n_4 = 319(470/1570) = 96$

Business sector	Number of Taxpayers	Sample size	Percent (%)
Agricultural sector	280	56	17.51
Manufacturing sector	100	20	6.29
Service sector	720	147	46.1
Other business sectors	470	96	30.1
Total	1,570	319	100

Source: Gedeo Zone Revenue authority (2023)

3.6. Data Collection Tools and Procedures

To collect data, structured questionnaires were developed. The questionnaires were include both closed-ended and Likert scale questions, enabling respondents to provide quantitative responses. The questionnaires were designed to capture information related to the independent and dependent variables, ensuring comprehensive data collection for analysis. The questionnaires were developed and translated from English to Amharic and Gedeo language in order to reduce language understanding barriers and get correct attitude or perception of taxpayers about the topic.

3.7. Data Analysis Tools

The collected data will be analyzed using statistical analysis software, such as SPSS (Statistical Package for Social Sciences). Descriptive statistics, such as means, frequencies, and percentages, will be used to summarize the data. Inferential statistical techniques, such as correlation and regression analysis, will be employed to examine relationships between variables and test hypotheses.

3.8. Operational Definition of Variables

Dependent variable
Presumptive Tax Voluntary Compliance
Presumptive Tax Voluntary Compliance can be operationally defined as a tax system in which taxpayers are given the option to voluntarily declare and pay a predetermined amount of tax based on presumptive indicators, such as business activity or income levels. This system allows taxpayers to avoid the burden of maintaining detailed records or undergoing extensive audits, by instead choosing to pay a fixed amount of tax that is deemed adequate based on reasonable assumptions about their business or income. The operational definition would include specific criteria or guidelines to determine eligibility and the presumptive indicators used to calculate the tax amount.
Operational definition independent variables variable:

1. Collection Enforcement: The degree to which tax collectors and authorities actively ensure the collection of presumptive taxes from taxpayers in the Gedeo Zone.
2. Tax Evasion: The deliberate and illegal act of taxpayers in the Gedeo Zone avoiding or underreporting their tax liability in order to reduce their tax burden.
3. Taxpayers' Awareness: The level of knowledge and understanding that taxpayers in the Gedeo Zone have regarding their obligations and liabilities towards presumptive taxes.
4. Existence of Corruption: The presence and extent of corrupt practices within the tax administration system in the Gedeo Zone, which may hinder or facilitate presumptive tax compliance.
5. Tax Incentives: The incentives and benefits provided by the Gedeo Zone government to taxpayers to encourage them to comply with their presumptive tax obligations.
6. Transparency and Fairness: The extent to which the presumptive tax system in the Gedeo Zone is transparent, fair, and perceived as equitable by taxpayers.
7. Supportive Tax Environment: The overall conducive and supportive environment created by the Gedeo Zone government to facilitate voluntary compliance with presumptive taxes.

3.9. Ordered Logistic Model Equation

Presumptive Tax Voluntary Compliance = $\beta 0 + \beta 1$(Collection Enforcement) + $\beta 2$(Tax Evasion) + $\beta 3$(Taxpayers' Awareness) + $\beta 4$(Existence of Corruption) + $\beta 5$(Tax Incentives) + $\beta 6$(Transparency and Fairness) + $\beta 7$(Supportive Tax Environment) + ε

(Note: $\beta 0$ represents the intercept, $\beta 1$-$\beta 7$ represent the coefficients of the independent variables, and ε represents the error term)

3.10. Reliability and Validity of Questionnaire

In order to ensure the reliability and validity of our research findings, several tests were conducted. For reliability, a

test-retest method was used to assess the consistency of the measurements of our dependent variable, Presumptive Tax Voluntary Compliance, over time. A sample of participants was selected and administered the same questionnaire twice, with a certain time interval in between. The scores obtained from the two administrations were compared using statistical techniques, such as the Pearson correlation coefficient, to determine the degree of agreement. Additionally, internal consistency reliability was assessed using Cronbach's alpha, to evaluate the extent to which the items in our questionnaire, related to our independent variables, are measuring the same construct. On the other hand, for validity, content validity was ensured by carefully developing the questionnaire items based on an extensive review of relevant literature and expert opinions.

4. Results

4.1. Response Rate

A total of 319 taxpayer respondents in Gedeo Zone were targeted to receive questionnaires. Out of this total, 318 respondents properly filled and returned their questionnaires within the specified time period. This indicates a response rate of 99%, showing that the majority of respondents participated in the data collection process. The high response rate can be attributed to the study design, timing, and consistent follow-up of participants. The collected questionnaires were analyzed using SPSS version 25.0.

4.2. Descriptive Statistics

Table 2. Summary of Descriptive Statistics.

	N	Minimum	Maximum	Mean	Std. Deviation
Presumptive Tax Voluntary Compliance (PTVC)	318	1	5	2.65	1.226
Collection Enforcement (CE)	318	1	5	2.81	1.243
Tax evasion (TE)	318	1	5	2.95	1.210
Taxpayers' Awareness (TA)	318	1	5	2.59	1.096
Corruption (COR)	318	1	5	2.91	1.155
Tax Incentives (TI)	318	1	5	2.48	1.177
Transparency and Fairness(TF)	318	1	5	3.16	1.293
Supportive Tax Environment (STE)	318	1	5	2.90	.960

Source: Survey result, 2023

The mean value interpretation for each variable in the table is as Presumptive Tax Voluntary Compliance (Mean: 2.65) - On average, respondents rated the level of voluntary compliance with presumptive tax as 2.65 on a scale of 1 to 5. Collection Enforcement (Mean: 2.81) - On average, respondents rated the effectiveness of collection enforcement measures for tax compliance as 2.81 on a scale of 1 to 5. Tax Evasion (Mean: 2.9591) - On average, respondents rated the level of tax evasion as 2.9591 on a scale of 1 to 5. Taxpayers' Awareness (Mean: 2.59) - On average, respondents rated the level of awareness among taxpayers regarding their tax obligations as 2.59 on a scale of 1 to 5. Existence of Corruption (Mean: 2.9119) - On average, respondents rated the presence of corruption in the tax system as 2.9119 on a scale of 1 to 5.

Tax Incentives (Mean: 2.48) - On average, respondents rated the effectiveness of tax incentives in promoting compliance as 2.48 on a scale of 1 to 5. Transparency and Fairness (Mean: 3.16) - On average, respondents rated the level of

transparency and fairness in the tax system as 3.16 on a scale of 1 to 5. Supportive Tax Environment (Mean: 2.90) - On average, respondents rated the level of supportiveness of the tax environment as 2.90 on a scale of 1 to 5. These mean values represent the average ratings provided by the respondents for each variable, indicating their perceptions or experiences regarding the specific factors affecting presumptive tax voluntary compliance.

4.3. Correlation Analysis

Correlation analysis measures the relationship between two items. The resulting value, called the correlation coefficient, indicates whether changes in one item are accompanied by changes in the other item. Correlation is used to quantify the degree of association or relationship between two or more variables. The correlation matrix for this study was computed and is presented in the following table 3.

Table 3. *Correlations.*

		0	1	2	3	4	5	6	7
Presumptive Tax Voluntary Compliance	Pearson Correlation	1							
CE	Pearson Correlation	.357**	1						
TE	Pearson Correlation	-.078	-.091	1					
TA	Pearson Correlation	.397**	-.099	.601**	1				
COR	Pearson Correlation	-.093	-.020	-.113*	.027	1			
TI	Pearson Correlation	.290**	.146**	-.015	.114*	-.008	1		
TF	Pearson Correlation	.170**	-.443**	.200**	.243**	-.058	-.009	1	
STE	Pearson Correlation	.440**	.371**	-.166**	-.146**	-.056	-.028	.086	1

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Source: survey result, 2023

The interpretations for the Pearson Correlation coefficients of each variable in relation to Presumptive Tax Voluntary Compliance are as follows:

Collection Enforcement: There is a positive correlation (0.357) between Collection Enforcement and Presumptive Tax Voluntary Compliance. This suggests that as the effectiveness of Collection Enforcement increases, there is a tendency for higher levels of voluntary compliance with presumptive tax. Tax evasion: There is a negative correlation (-0.078) between Tax evasion and Presumptive Tax Voluntary Compliance. This implies that as tax evasion increases, there is a slight decrease in the level of voluntary compliance with presumptive tax, although the correlation is not statistically significant. Taxpayers' Awareness: There is a positive correlation (0.397) between Taxpayers' Awareness and Presumptive Tax Voluntary Compliance. As taxpayers become more aware of their tax obligations, there is a tendency for higher levels of voluntary compliance with presumptive tax. Corruption: There is a negative correlation (-0.093) between corruption and Presumptive Tax Voluntary Compliance. This suggests that as corruption levels increase, there is a slight decrease in the level of voluntary compliance with presumptive tax, although the correlation is not statistically significant. Tax Incentives: There is a positive correlation (0.290) between Tax Incentives and Presumptive Tax Voluntary Compliance. This implies that the presence of tax incentives may

encourage higher levels of voluntary compliance with presumptive tax. Transparency and Fairness: There is a positive correlation (0.170) between Transparency and Fairness and Presumptive Tax Voluntary Compliance. As the transparency and fairness of the tax system increases, there is a tendency for higher levels of voluntary compliance with presumptive tax. Supportive Tax Environment: There is a positive correlation (0.440) between Supportive Tax Environment and Presumptive Tax Voluntary Compliance. This suggests that a supportive tax environment, which includes factors such as simplified tax procedures and taxpayer-friendly policies, may lead to higher levels of voluntary compliance with presumptive tax.

4.4. Regression Result Analysis

Model Fitting Information

The model fitting hypothesis baseline model is the model without explanatory variables but the final model is the model with explanatory variables. Hence, the hypothesis can be developed as follow:

H0: There is no significant difference between the baseline model and the final model

H1: There is significance between the baseline model and the final model

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	973.185			
Final	708.597	264.587	7	.000

Link function: Logit.

Survey result, 2023

The model fitting information indicates that the -2 Log Likelihood for the final model is 708.597, which is lower than the -2 Log Likelihood of 973.185 for the intercept-only model. This suggests that the final model is a better fit for the data. The Chi-Square statistic is 264.587, with 7 degrees of freedom. The significance level for this statistic is .000, indicating that the final model is statistically significant. The link function used in the model is Logit, which implies that it is a logistic regression model. This means that the model is modeling the probability of an event occurring. Overall, the model fitting information suggests that the final logistic regression model is a good fit for the data and has statistically significant predictors.

Table 5. Goodness-of-Fit.

	Chi-Square	df	Sig.
Pearson	1261.450	421	.000
Deviance	708.597	421	.000

Link function: Logit.

Survey result, 2023

This output is from a goodness-of-fit test using the Chi-Square test statistic. The test is used to determine if there is a significant difference between observed and expected frequencies in a categorical variable. In this case, two different test statistics are reported: Pearson and Deviance. The Pearson statistic is often used for large sample sizes, while the Deviance statistic is preferred for small sample sizes.

The test is conducted with 421 degrees of freedom and both statistics produce a p-value of .000, indicating a significant difference between the observed and expected frequencies. The link function used in the analysis is the Logit function, which is commonly used in logistic regression models to link the linear predictors to the probability of success. Overall, this output suggests that there is a significant difference between the observed and expected frequencies in the categorical variable being tested.

Table 6. Pseudo R-Square.

Pseudo R-Square	
Cox and Snell	.565
Nagelkerke	.593
McFadden	.272

Link function: Logit.

Source: Survey data, 2023

Based on the provided Pseudo R-Square values, we can interpret the results as follows:

Cox and Snell Pseudo R-Square: 0.565. This means that 56.5% of the variation in Presumptive Tax Voluntary Compliance can be explained by the independent variables included in your study Collection Enforcement, Tax Evasion, Taxpayers' awareness, Existence of Corruption, tax incentives, Transparency and fairness, and Supportive tax environment. Nagelkerke Pseudo R-Square: 0.593. This suggests that 59.3% of the variation in Presumptive Tax Voluntary Compliance can be explained by the independent variables considered in your study. McFadden Pseudo R-Square: 0.272. This indicates that the McFadden Pseudo R-Square value is relatively lower compared to Cox and Snell and Nagelkerke Pseudo R-Square values. However, it still signifies that around 27.2% of the variation in Presumptive Tax Voluntary Compliance can be explained by the independent variables. Overall, these Pseudo R-Square values indicate that the independent variables - Collection Enforcement, Tax Evasion, Taxpayers' awareness, Existence of Corruption, tax incentives, Transparency and fairness, and Supportive tax environment - included in your study have a moderate to substantial impact on explaining the variation in Presumptive Tax Voluntary Compliance in Gedeo Zone.

Table 7. Ordered logistic Regression Result: Business Income tax collection.

Parameter Estimates							95% Confidence Interval	
		Estimate	Std. Error	Wald	df	Sig.	Lower Bound	Upper Bound
Threshold	[PTVC = 1]	7.577	.833	82.728	1	.000	5.944	9.210
	[PTVC = 2]	9.573	.886	116.820	1	.000	7.837	11.308
	[PTVC = 3]	11.252	.944	142.017	1	.000	9.401	13.102
	[PTVC = 4]	14.390	1.108	168.655	1	.000	12.218	16.562
Location	CE	.721	.118	37.357	1	.000	.490	.952
	TE	-.421	.122	11.846	1	.001	-.661	-.181
	TA	1.511	.154	95.717	1	.000	1.208	1.814
	COR	-.209	.097	4.620	1	.032	-.399	-.018
	TI	.430	.099	19.039	1	.000	.237	.624
	TF	.357	.105	11.647	1	.001	.152	.563
	STE	1.199	.153	61.710	1	.000	.900	1.498

Link function: Logit.

Source: Survey result, 2023

The model you have estimated is a logistic regression model, with the dependent variable being Presumptive Tax Voluntary Compliance (PTVC). The independent variables included in the model are Collection Enforcement, Tax Evasion, Taxpayers' Awareness, Existence of Corruption, Tax Incentives, Transparency and Fairness, and Supportive Tax Environment. The parameter estimates in the table provide information about the effect of each independent variable on the probability of PTVC. The estimates represent the change in the log odds of PTVC for a one-unit increase in the corresponding independent variable, while holding other independent variables constant. Based on the estimates, here are the interpretations: These interpretations are based on the assumption of a logit link function in the logistic regression model.

Threshold: The estimates under the "Threshold" category represent the baseline log odds of PTVC for each level of the categorical variable PTVC. For example, the log odds of PTVC for PTVC = 1 is estimated to be 7.577. Collection Enforcement: For every one unit increase in Collection Enforcement, the log odds of PTVC increase by 0.721. This suggests that stronger collection enforcement is associated with a higher probability of PTVC. Tax Evasion: For every one unit increase in Tax Evasion, the log odds of PTVC decrease by 0.421. This indicates that higher levels of tax evasion are associated with a lower probability of PTVC. Taxpayers' Awareness: For every one unit increase in Taxpayers' Awareness, the log odds of PTVC increase by 1.511. This

suggests that greater awareness among taxpayers is associated with a higher probability of PTVC. Existence of Corruption: For every one unit increase in the Existence of Corruption, the log odds of PTVC decrease by 0.209. This suggests that higher levels of corruption are associated with a lower probability of PTVC. Tax Incentives: For every one unit increase in Tax Incentives, the log odds of PTVC increase by 0.430. This indicates that the presence of tax incentives is associated with a higher probability of PTVC. Transparency and Fairness: For every one unit increase in Transparency and Fairness, the log odds of PTVC increase by 0.357. This suggests that greater transparency and fairness in the tax system is associated with a higher probability of PTVC. Supportive Tax Environment: For every one unit increase in Supportive Tax Environment, the log odds of PTVC increase by 1.199. This indicates that a more supportive tax environment is associated with a higher probability of PTVC.

5. Discussion

Based on the results of the ordered logistic regression analysis, the study finds that several factors have a statistically significant and positive effect on Presumptive Tax Voluntary Compliance of taxpayers in Gedeo Zone. These factors include Collection Enforcement, Taxpayers' awareness, tax incentives, Transparency and fairness, and Supportive tax environment. On the other hand, Tax Evasion and Existence

of Corruption have a negative and statistically significant effect on Presumptive Tax Voluntary Compliance. To support the hypothesis and compare with prior studies, we can refer to the concept of deterrence theory. Deterrence theory suggests that the enforcement of penalties and sanctions plays a significant role in encouraging tax compliance. In line with this theory, Collection Enforcement is found to have a positive effect on Presumptive Tax Voluntary Compliance. This finding is consistent with a study conducted by [2-9] which found that increased deterrence activities had a positive impact on tax compliance. Furthermore, Taxpayers' awareness is another significant factor identified in this study. Prior research by [3-11] supports this finding, as they suggest that increasing taxpayers' knowledge and understanding of their tax obligations can contribute to improving compliance rates. Higher levels of awareness among taxpayers may lead to greater voluntary compliance. Tax incentives are also found to have a positive effect on Presumptive Tax Voluntary Compliance. This finding aligns with previous research by Frey and [28-33] which showed that offering tax incentives can motivate taxpayers to comply willingly with their tax obligations. These incentives may include reduced tax rates, tax exemptions, or tax deductions, which can increase taxpayers' motivation to comply. Transparency and fairness are crucial factors in encouraging voluntary compliance. Prior research by [3-10] supports this notion, as they found that perceptions of fairness in the tax system positively influenced compliance behavior. Transparency in tax administration increases taxpayers' trust and confidence in the system. The presence of a supportive tax environment is also found to have a positive effect on Presumptive Tax Voluntary Compliance. Prior studies by [3-12] emphasized the importance of a supportive tax environment to foster compliance. A supportive tax environment includes factors such as clear and simple tax laws, efficient tax administration, and taxpayer-friendly services.

On the contrary, Tax Evasion is found to have a negative effect on Presumptive Tax Voluntary Compliance. This finding is consistent with prior studies by [2-26], which established a negative relationship between tax evasion and tax compliance. Taxpayers engaging in evasion activities may have a decreased willingness to voluntarily comply with their tax obligations.

Similarly, the negative effect of Existence of Corruption on Presumptive Tax Voluntary Compliance is supported by prior studies. Research by [3-30] suggested that corruption erodes trust in the tax system and undermines compliance. The presence of corruption can create a perception of unfairness, favoritism, and bribery among taxpayers, which hampers their willingness to comply voluntarily.

6. Conclusions

Based on the empirical results of this study, it can be concluded that several factors have a significant impact on Presumptive Tax Voluntary Compliance. These factors include Collection Enforcement, Taxpayers' awareness, tax incentives, Transparency and fairness, and Supportive tax environment. Firstly, the positive effect of Collection Enforcement suggests that implementing strict measures to ensure tax compliance, such as conducting regular audits and imposing penalties for non-compliance, can effectively improve voluntary compliance. Therefore, it is recommended for policymakers and tax administrators to enhance the enforcement mechanisms to discourage tax evasion and promote compliance. Secondly, the positive effect of Taxpayers' awareness indicates the importance of educating taxpayers about their tax obligations and the benefits of compliance. Policymakers and tax administrators should develop effective public awareness campaigns, workshops, and educational materials to educate taxpayers and increase their knowledge about tax compliance. Thirdly, the positive effect of tax incentives highlights the effectiveness of providing tax benefits or rewards for compliant behavior. Policymakers and tax administrators should consider implementing tax incentives, such as tax credits or deductions, to encourage voluntary compliance and incentivize taxpayers to fulfill their tax obligations. Fourthly, the positive effect of Transparency and fairness emphasizes the significance of maintaining a transparent and fair tax system. Policymakers and tax administrators should ensure that tax laws and procedures are clear and easily understandable for taxpayers. Additionally, they should strive to create an environment where taxpayers perceive the tax system to be fair and equitable. Lastly, the positive effect of a Supportive tax environment suggests that offering assistance and support to taxpayers can foster voluntary compliance. Policymakers and tax administrators should provide easy access to tax-related information, guidance, and support services to assist taxpayers in fulfilling their tax obligations. On the other hand, the negative effects of Tax Evasion and Existence of Corruption indicate that these variables hinder voluntary compliance. To address this, policymakers and tax administrators should strengthen efforts to combat tax evasion by implementing stronger anti-evasion measures, such as closer monitoring of high-risk taxpayers and enhancing cross-border cooperation to detect offshore tax evasion. Additionally, they should take measures to reduce corruption within the tax administration, such as implementing stricter internal controls and promoting ethical behavior among tax officials. In conclusion, this study provides valuable insights for policymakers and tax administrators to improve Presumptive Tax Voluntary Compliance. By enhancing collection enforcement, increasing taxpayers' awareness, providing tax incentives, promoting transparency and fairness, creating a supportive tax environment, combating tax evasion, and reducing corruption, policymakers and tax administrators can contribute to a higher level of voluntary compliance, resulting in increased tax revenue and a more efficient tax system.

Abbreviations

CE: Collection Enforcement
COR: Corruption
PTVC: Presumptive Tax Voluntary Compliance
STE: Supportive Tax Environment
TA: Taxpayers' Awareness
TE: Tax Evasion
TF: Transparency and Fairness
TI: Tax Incentives

Ethical Consideration

In conducting this research, ethical considerations were upheld to ensure the protection of participants' rights. Informed consent was obtained from all participants, and their identities were kept confidential. Privacy and anonymity were maintained throughout the data collection and analysis process. Furthermore, no harm or distress would cause to the participants, and their voluntary participation in the study was emphasized. The research adhere to ethical guidelines set by the relevant institutions and obtain necessary approvals beforehand.

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Conflicts of Interest

The authors declare no conflicts of interest.

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