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## Determinants of Tax Audit Effectiveness in Ghana

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### **Abstract:**

*Purpose: The aim of this study is to examine the factors that influence tax audit effectiveness in the context of Ghana.*

*Design/ Methodology/Approach: The study uses the quantitative approach and survey design. Stratified sampling is adopted to select a sample of 205 auditors from tax auditors in DTRD of GRA. The survey is conducted to obtain primary data by distributing a structured research questionnaire to respondents. A hierarchical regression analysis was adopted to analyze the data obtained using SPSS.*

*Findings: Organizational and regulatory factors are significant predictors of tax audit effectiveness, but tax auditor factors have no significant influence on tax audit effectiveness.*

*Implications/Research limitations: The study extends the literature on tax audit effectiveness and its determining factors, especially in developing countries like Ghana. However, it is limited to only tax auditors within DTRD of GRA.*

*Practical implications: The study's findings have the potential to influence GRA's top management to enhance their organizational arrangements and management support for tax audit activities, enhancing the process for the state's benefit.*

*Originality of value: This study brings to bear the major determinants of tax audit effectiveness for enhanced revenue mobilization in a developing country context that are not predominant in existing literature.*

**Keywords:** Tax audit effectiveness, organizational factors, tax auditor factors, regulatory factors, tax auditor(s)

### **1. Introduction**

Taxation has been a longstanding practice in human culture. It traces its origins to the early stages of human history, although it existed in a different form than it does today. Both in theory and in reality, it functions as an essential source of income for governments worldwide (Waluyo, 2016). There is no doubt that all governments depend on taxation to generate revenue in order to provide necessary services for their citizens (OECD, 2014). As Lymer et al. (2012) put it, taxation serves as the foundation for building national economies. This suggests that virtually all national economies can hardly function without taxation.

It is crucial to acknowledge that many multilateral organizations and international development partners highlight the importance of taxation as a vital tool for fostering sustainable economic development in states worldwide (Rahman, 2023). Strengthening tax systems has become a crucial element in assuring the mobilization of sufficient tax income to drive economic development in countries. Establishing a framework to enhance a strong tax system is crucial in nations such as Ghana, where the tax-to-GDP ratio is extremely low. In order for a tax system to be strong enough to generate sufficient tax revenue, it is argued that an effective tax audit as part of the overall tax administration is crucial. Adediran et al. (2013) define that tax audit as a method of obtaining information to assess the level of conformity with tax regulations in a specific jurisdiction, state, or country, similar to a financial audit. Indeed, an effective and efficient tax audit function helps to address the growing complexities in business activities and tax evasion schemes (Dimitra & Ioannis, 2015; Onuoha & Dada, 2016; Amah & Nwaiwu, 2018).

Typically, the taxpayer has a tendency to evade taxes. This tendency has even received a push with the increasing globalization and advancement in technology that make it easier for taxpayers to evade taxes. This lends credence to the need for a vibrant tax audit function in tax administration bodies to keep up with current trends in business operations so that potential areas of weakness that open the floodgate for tax evasion are sealed. However, the question is, what factors account for the effectiveness of tax audits? This indeed calls for a probe to determine the key factors that influence the effectiveness of tax audits.

Although effective tax audits play a crucial role in increasing revenue mobilization and managing the economy, existing literature on the subject of taxation in Ghana has not thoroughly examined the empirical factors that determine the effectiveness of tax audits. The studies of Bekoe et al. (2016), Abdul-Razak and Adafula (2013), Bedi (2016), and Acheampong et al. (2016) have examined various significant aspects of taxes. However, they have not specifically investigated the factors influencing the success of tax audits. Furthermore, Amponsah et al. (2019), Owusu (2019), and Okpeyo et al. (2019) have also investigated important aspects related to taxation and tax audit in Ghana without recourse

to investigating the determinants of tax audit effectiveness. As far as the researcher knows, no study has examined the determinants of tax audit effectiveness in Ghana. Thus, this study aims to fill this gap.

## 2. Literature Review

### 2.1. Theoretical Review

The study relies on three main theories as its theoretical basis. Firstly, it uses the contingency theory as the theoretical foundation for the relationship between organizational factors and tax audit effectiveness. Contingency theory is an approach to studying organizational behavior that explains various factors, such as technology, culture, management, and the external environment, that can affect the design and function of an organization (Slater et al., 2010). In the context of tax audit effectiveness, contingency theory suggests that the effectiveness of tax audits may be contingent upon various organizational factors. These factors could include top management support, leadership style, policies in place, budget allocation for audit activities, and organizational structure, among others (Slater et al., 2010). Therefore, contingency theory provides a framework for understanding how these organizational factors can influence the effectiveness of tax audits and suggests that there is no one-size-fits-all approach to conducting tax audits. However, these factors interact with each other and with the external environment to shape the effectiveness of tax audits. In harmony with the contingency viewpoint, Drogalas et al. (2015) assert that variables such as technology (i.e. information systems) help improve the effectiveness of tax audits. Similarly, Melat (2016) buttresses the contingency argument in explaining the effectiveness of tax audits by indicating that institutional setting, structure, and role and responsibilities are key to an organization's efficiency and effectiveness. Therefore, it can be argued that when contingent variables like organizational structure, management support, technology or information systems, and quality management systems, among others, are in place, it helps enhance the quality of institutions charged with tax administration and consequently enhances the effectiveness of tax audits.

Secondly, it uses the agency theory as the theoretical basis for the relationship between tax audit factors and tax audit effectiveness. Agency theory is a widely used theory that explains the relationship between tax-auditor-related factors and tax audit effectiveness (Johari et al., 2019). Agency theory posits that when it comes to tax audits, there is a principal-agent relationship between the government (principal) and the tax auditors (agent) (Frezatti et al., 2013). The government, as the principal, has limited information about the tax activities of individuals and businesses. As a result, they rely on tax auditors, who act as their agents, to gather information and enforce compliance with tax regulations (Alqooti, 2020). It is also important to mention that while there exists a relationship between the government and tax auditors, there is also a relationship between tax auditors and taxpayers. Therefore, this dual relationship may impede the tax auditors' role as it may compromise independence and trust since tax auditors may be motivated by their own self-interest, which may not always align with the interests of the government. However, Chalu and Mzee (2018) observe that increased professionalism can help strengthen these relationships, leading to enhanced independence and trust. With an increase in independence and trust, the tax auditor stands in a pole position to execute the audit in an effective manner that benefits both the government and taxpayers. It is worth noting that apart from professionalism, their role as agents requires that tax auditors take the necessary steps to possess the right skills, training, and knowledge to execute their work to satisfy the interests of their principals (Muhammad, 2013). Given their role as agents from the agency theory viewpoint, it can be argued that tax auditors play an instrumental role in ensuring that tax audits are conducted in an effective manner to enhance the government revenue mobilization drive. Therefore, tax auditor factors are necessary for ensuring an effective tax audit since they play an intermediary role between the government and taxpayers by reporting non-compliance and enforcing compliance.

Thirdly, the study employs the theory of economic regulation as the theoretical underpinning for the link between regulatory factors and tax audit effectiveness. The theory of economic regulation supports this study in that taxation itself is an economic activity guided by regulations. Advanced by Stigler (1971), the theory suggests that regulations are put in place to protect and benefit the public. This means certain regulations are instituted to impact the effectiveness of the system(s) for the general good. Additionally, the theory of economic regulation highlights the importance of government effectiveness and regulatory quality in promoting positive institutional outcomes. With respect to tax, these regulations may include the existence of relevant tax laws and policies, a legal obligation to keep records by taxpayers, and legal power to access the documents by auditors without restrictions, among others. By creating an environment that seeks to strengthen these regulatory factors, managers of tax authorities can enhance tax audit effectiveness and ultimately promote compliance with tax regulations. As indicated by Chalu and Mzee (2018), regulatory factors serve as fertile primary ground for the execution of all tax activities. Therefore, an argument is advanced that regulatory factors significantly impact tax audit effectiveness.

### 2.2. Empirical Review and Hypothesis Development

#### 2.2.1. Organizational Factors and Tax Audit Effectiveness

Melat (2016) conducted a study to examine the factors that influence the success of tax audits in Large Ethiopian Companies. The study utilizes primary data and employs regression analysis to demonstrate that organizational characteristics, specifically the audit quality of the department and management support, have a considerable impact on the success of tax audits.

Furthermore, Mihret (2011) conducted a study examining how organizational characteristics influence the effectiveness of tax audits, focusing on the variables related to the tax audit function. The variables encompassed in this

context are the suitability of the audit type employed, the audit rate, the effectiveness of audit case selection procedures, the audit examination methodologies utilized, and the proficiency and competence of the tax auditing personnel. The study conclusively demonstrates that organizational characteristics have a substantial impact on the success of tax audits.

Supriyatin et al. (2019) examine the efficacy of tax audits in Greece, investigating the impact of organizational characteristics on tax audit effectiveness. Consistent with the aforementioned results, the study reveals that organizational characteristics have a major impact on the success of tax audits.

Ayalew (2014) conducted a study on the determinants of tax audit effectiveness among category 'A' taxpayers in Bahir Da City. In stark contrast to the aforementioned findings, this study reveals that organizational characteristics do not exert a substantial impact on the success of tax audits. Flowing from the results of the vast majority of empirical outcomes and supported by the argument advanced by the contingency theory indicated in the prior discussion under the theoretical review, the hypothesis is developed as follows:

- H1: Organizational factors exert a significant and positive influence on tax audit effectiveness.

**2.2.2. Tax Auditor Factors and Tax Audit Effectiveness**

Several studies have identified different connections between parameters related to tax audits and the success of tax audits. An example of such an investigation is the research conducted by Ayalew (2014). This study examines the elements that influence the success of tax audits. By utilizing education, experience, and training as significant indicators to represent tax auditor factors and employing correlation and regression techniques to analyze primary data, the study concludes that tax auditor factors have a substantial influence on tax audit efficacy.

Supriyatin et al. (2019) conducted a study in Indonesia to investigate the impact of tax auditor abilities on tax audit quality, with tax audit effectiveness being used as a measure of audit quality. The study utilized skills and experience as the main variables to represent factors related to tax auditors. Primary data is collected through a survey, and the data is analyzed using the partial least square structural equation modelling. The study finds a significant positive correlation between tax auditor factors and tax audit effectiveness. This finding is consistent with the results of Ayalew's (2014) study despite the fact that the two experiments are done in distinct circumstances. Given the trend of the empirical outcomes that depict tax auditor factors have significant tax audit effectiveness coupled with the argument advanced by the agency theory in the theoretical discussion, it is hypothesized that:

- H2: Tax auditor factors exert a significant and positive influence on tax audit effectiveness.

**2.2.3. Regulatory Factors and Tax Audit Effectiveness**

Regarding regulatory aspects, many pieces of research have yielded divergent results. A study done by Muhammad (2013) investigates the enforcement regulatory types employed by tax auditors. The study identifies five such modes: bargaining, explaining and teaching, firm enforcement, threatening, and avoiding. The study found that all the enforcement regulatory types used as proxies for regulatory elements have a substantial impact on assessing the success of tax audits.

In their study, Drogalas et al. (2015) examine the efficacy of tax audits in Greece. The study aimed to investigate the impact of regulatory parameters on the effectiveness of tax audits. The study utilizes primary data collected using a structured research questionnaire and applies factor analysis and regression analysis to analyze the data. It emerges that regulatory considerations have a significant and direct impact on the effectiveness of tax audits.

Chalu and Mzee (2018) investigate the factors that influence the efficiency of tax audits in Tanzania. The study examines the use of regulations and standards for tax audits and leadership and tax policies for tax audits as important indicators to represent regulatory elements. The purpose is to investigate the relationship between regulatory factors and the efficacy of tax audits. The study reveals that the presence of adequate regulatory variables has a direct and significant impact on the effectiveness of tax audits. This result corroborates the conclusions of previous research by Chalu and Mzee (2018) and Muhammad (2013) that demonstrate the significant influence of the regulatory element on the effectiveness of tax audits. In view of the foregoing empirical outcomes, complemented by the viewpoint of the theory of economic regulation as found in the theoretical discussion, it is hypothesized that:

- H3: Regulatory factors exert a significant and positive influence on tax audit effectiveness.

**2.3. Conceptual Framework**

The study provides the conceptual model to show the linkages of the study variables as follows:

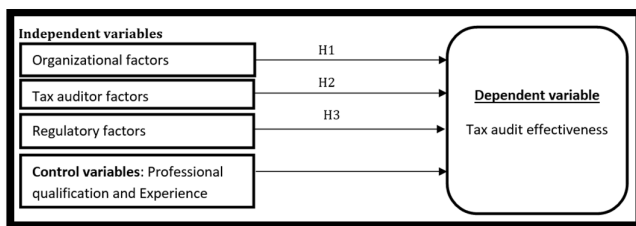


Figure 1: Conceptual Framework  
Source: Author (2024)

### 3. Data and Methodology

#### 3.1. Research Design

This study employs a quantitative research approach. As indicated by Saunders and Lewis (2012), this approach sets out to test the research model and the significance of the association between the constructs in order to confirm or dispute the hypothesis. Hence, the study adopts this approach since it aligns with a description grounded in literature (Saunders & Lewis, 2012), and this is consistent with the nature and aim of this study. The survey design is also used to solicit data for the study.

#### 3.2. Population and Sampling

The study focuses on tax auditors in the Ghana Revenue Authority (GRA) as its target population. In this regard, the study uses the 420 tax auditors in all the ten zonal tax audit offices within the Domestic Tax Revenue Department (DTRD) of the GRA as the population. The study uses the stratified sampling technique in the selection of participants to ensure fair representation of each subgroup (i.e. managerial and non-managerial tax audit staff). The sample size is 205 respondents (with a 94.63% response rate). The sample size is determined using the formula advanced by Yamane (1967). This formula is expressed as:

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

Where:

N is the population

e is the level of precision (margin of error)

Hence, the sample size is computed as:

$$n = \frac{420}{1 + 420 * 0.05^2} = 204.88 = 205$$

#### 3.3. Data Collection and Analysis

The survey is conducted to obtain primary data by distributing a structured research questionnaire to participants via email and WhatsApp. The questionnaire is adapted from Chalu and Mzee (2018). Both descriptive and inferential analyses are performed with the help of SPSS. The descriptive analysis mainly used frequency, percentages, mean, and standard deviation, and these are used to analyze the background information of respondents and the basic properties of the dataset. To test the hypotheses, the hierarchical regression analysis is used. Hierarchical regression is employed because it helps determine the contribution of each explanatory variable in predicting the outcome of a given dependent variable beyond the already entered predictors, serving as a statistical control and a means of checking incremental validity.

#### 3.4. Model Parameters and Variables

The models for the hierarchical regression are developed as follows:

Model 1

$$TAE = \alpha + \beta_1 PQU + \beta_2 EXP + \mu$$

Model 2

$$TAE = \alpha + \beta_1 PQU + \beta_2 EXP + \beta_3 ORG + \mu$$

Model 3

$$TAE = \alpha + \beta_1 PQU + \beta_2 EXP + \beta_3 ORG + \beta_4 AUD + \mu$$

Model 4

$$TAE = \alpha + \beta_1 PQU + \beta_2 EXP + \beta_3 ORG + \beta_4 AUD + \beta_5 REG + \mu$$

Where: TEA = Tax audit effectiveness; PQU = professional qualification; EXP = Experience; ORG = Organizational factors; AUD = Tax auditor factors; REG = Regulatory factors;  $\alpha$  = the constant term;  $\beta$  = Regression coefficients; and  $\mu$  = error term.

#### 3.4.1. Variables

##### 3.4.1.1. Dependent Variable

Tax audit effectiveness is the dependent variable. This is assessed using responses to statements on the effectiveness of tax audits via a five-point Likert scale, which is consistent with the literature (Chalu & Mzee, 2018).

##### 3.4.1.2. Independent Variables

Organizational factors, tax auditor factors, and regulatory factors are the predictor variables. These are measured using responses to statements on the various factors via five point liker scale in consistent with literature (Chalu & Mzee).

##### 3.4.1.3. Control Variables

To eliminate bias due to omitted variables, professional qualifications and experience of tax auditors were employed as control variables. Professional qualification is key to enhancing the expertise and skills of tax auditors for an effective tax audit. This variable takes the value of 1 if the tax auditor does not have professional qualifications related to taxation, accounting, and audit and takes the value of 2 if the tax auditor has professional qualifications in taxation, accounting, and audit.

Experience is key in enhancing the skills of tax auditors to identify misstatements and non-compliance by taxpayers. This variable takes a value of 1 if the auditor has up to 5 years of experience, a value of 2 if the auditor has 6 to 10 years of experience, and a value of 3 if the auditor has more than 10 years of experience.

#### 4. Data Analysis and Results

##### 4.1. Background of Respondents

Table 1 reveals that males are more than females among the respondents (54.1% vs. 45.9%). It is seen that most participants are in the age range of 31 to 40 years (35.1%), followed by those in the range of 41 to 50 years (25.3%). It emerges that 21.5% of respondents are above 50 years old, and 18% are within the age range of 18-30 years. It is seen that the majority of the participants have a bachelor's degree as their highest educational qualification (62.4). 37.6% of the respondents have a master's degree or above, but none of the participants has a diploma as their highest educational qualification. Also, among the participants, 54.6% have no professional qualification in taxation, accounting, or taxation, but 45.4% have these professional qualifications. The majority of the participants have 6 to 10 years of experience (40.2%), 35.6% have 0 to 5 years of experience, and 24.2% have more than 10 years of experience. It is also seen that the majority of the respondents are auditors at the operational levels of the organogram (70.1%), 24.7 are in audit supervisory positions, and 5.2% are in audit manager positions.

##### 4.2. Reliability Analysis

The reliability test is based on Cronbach's Alpha. This technique is used extensively and recognized as one of the most effective (Pallant, 2020). From table 2, Cronbach's Alpha reliability analysis shows that organizational factors =.885, auditor factors =.848, regulatory factors =.674, and tax audit effectiveness =.875. The results indicate that the constructs are reliable since they are all beyond the minimum threshold of 0.6, as suggested by Hair (2010).

	Frequency (n=194)	Percentage (%)
<b>Gender</b>		
Male	105	54.1
Female	89	45.9
<b>Age</b>		
18-30 years	35	18
31-40 years	68	35.1
41-50 years	49	25.3
Above 50 years	42	21.6
<b>Education</b>		
Diploma	0	0
Bachelor's degree	121	62.4
Master's degree or above	73	37.6
<b>Professional Qualification</b>		
No	106	54.6
Yes	88	45.4
<b>Experience</b>		
0-5 years	69	35.6
6-10 years	78	40.2
Above 10 years	47	24.2
<b>Position</b>		
Auditor	136	70.1
Audit supervisor	48	24.7
Audit manager	10	5.2

Table 1: Background Characteristics of Respondents

Variable	No. of Items	Cronbach's Alpha ( $\alpha$ )
TAE	6	0.875
ORG	8	0.885
AUD	5	0.848
REG	6	0.674

Table 2: Reliability Analysis of the Constructs

NB: TAE = Tax Audit Effectiveness, ORG = Organizational Factors, AUD = Tax Auditor Factors, REG = Regulatory Factors

##### 4.3. Descriptive and Normality Analysis

Table 3 shows the results of descriptive and normality analysis. It is observed that the lowest mean value among the variables is 3.717, whilst the highest mean value is 3.935. The minimum standard deviation value is 0.609.

The normality test is based on skewness and kurtosis. The skewness measures the level at which the variable distribution is symmetrical, and it is considered excellent when it ranges from -1 to +1 but considered acceptable when it ranges from -2 to +2 (Hair et al., 2022). Also, kurtosis measures the extent to which the distribution is peaked or otherwise, and it is considered to be acceptable when it ranges from -3 to +3 (Hair et al., 2022). The results in table 3 show that the values of both skewness and kurtosis of the variables are within the acceptable range, thus meeting the normality assumption.

	Mean	Standard Dev.	Skewness	Kurtosis
TAE	3.755	.703	-0.535	0.087
ORG	3.717	.759	-1.443	2.593
AUD	3.935	.775	-1.417	2.905
REG	3.745	.609	-0.885	2.027

Table 3: Descriptive Statistics and Normality Analysis  
 NB: TAE = Tax Audit Effectiveness, ORG = Organizational Factors,  
 AUD = Tax Auditor Factors, REG = Regulatory Factors

4.4. Correlation and Multicollinearity Analysis

Table 4 shows the results of the correlation and collinearity analysis. From the table, there is a significant and positive correlation between tax audit effectiveness and organizational factors (r=.394), tax auditor factors (r=.327), and regulatory factors (r=.641), all at P<0.01. It is clear that none of the correlations between the pairs of independent variables is beyond the limit of 0.90 (Hair et al., 2010) to trigger a multicollinearity challenge.

Additionally, multicollinearity is tested using the tolerance and variance inflation factor (VIF). Table 4 shows that the tolerance values for all the variables exceed the minimum threshold of 0.20, while the VIF values are less than the maximum threshold value of 10 (Mansfield & Helms, 1982). Thus, the assumption of multicollinearity is met, suggesting that multicollinearity is not a problem in this study.

	TAE	ORG	AUD	REG	PQU	EXP	Collinearity Statistics	
							Tolerance	VIF
TAE	1							
ORG	.394***	1					0.596	1.678
AUD	.327***	.624***	1				0.489	2.044
REG	.641***	.446***	.585***	1			0.634	1.576
PQU	-.039	.058	.034	-0.089	1		0.976	1.024
EXP	-.044	.006	-.058	-0.023	-0.014	1	0.994	1.006

Table 4: Correlation and Collinearity Analysis  
 \*\*\* Correlation Is Significant at the 0.01 level (2-tailed).  
 NB: TAE = Tax Audit Effectiveness, ORG = Organizational Factors,  
 AUD = Tax Auditor Factors, REG = Regulatory Factors,  
 PQU = Professional Qualification, EXP = Years of Experience

4.5. Influence of Organizational, Tax auditor and Regulatory Factors on Tax Audit Effectiveness

Table 5 displays the results of the analysis on the influence of the independent and control variables on the dependent variable (tax audit effectiveness) based on hierarchical regression analysis in 4 models. Model 1 comprises only the control variables, while models 2, 3, and 4 reveal each predictor variable added in sequence to establish their contribution to predicting tax audit effectiveness. The results in Model 1 show that none of the control variables is significant in predicting the effectiveness of tax audit, and this accounts for the small variance (0.3%) they exert on tax audit effectiveness, R<sup>2</sup>=0.003, ΔR<sup>2</sup>=0.003, F(2,191), P<.05.

From table 5, the inclusion of organizational factors (Model 2) added an additional 15.8% variance in tax audit effectiveness, ΔR<sup>2</sup>=0.158, F(1,190), P<.01. The results also show that organizational factors significantly predict tax audit effectiveness (β=.398; CI=.247, .490; P<.01). Given this results, the first hypothesis is accepted.

Results in table 5 further show that the addition of tax auditor factors (Model 3) added only 1% additional variance in tax audit effectiveness, ΔR<sup>2</sup>=0.010, F(1,189), P<.01. Tax auditor factors emerge as not significant predictor of tax audit effectiveness (β=.128; CI= -.036, .268; P>.10). In this regard, the second hypothesis is rejected.

The results, as shown in table 5, further reveal that the inclusion of regulatory factors (Model 4) contributes an additional 27.5% of the variance in tax audit effectiveness, ΔR<sup>2</sup> =.275, F(1,188), P<.01. Moreover, the results show regulatory factors is a major predictor of tax audit effectiveness (β=.659; CI=.605, .915; P<.01). Therefore, the third hypothesis is accepted.

As shown in table 5, Model 4 displays the entire effect of all the predictor variables on tax audit effectiveness. It emerges that regulatory factors are the major predictor of tax audit effectiveness (β=.659, P< .01), followed by organizational factors (β=.226, P<.01), and lastly, tax auditor factors which exert negative influence (β=-.202, P<.05). The model generally explains 44.7% of the variance in tax audit effectiveness.

	Model 1		Model 2		Model 3		Model 4	
	$\beta$	CI:95%	$\beta$	CI:95%	$\beta$	CI:95%	$\beta$	CI:95%
PQU	-.039	-.256, .145	-.062	-.273, .097	-.062	-.271, .097	.013	-.134, .171
EXP	-.045	-.172, .090	-.047	-.163, .077	-.040	-.156, .084	-.042	-.136, .060
ORG			.398***	.247, .490	.318***	.139, .450	.226***	.081, .337
AUD					0.128	-.036, .268	-.202**	-.322, -.045
REG							.659***	.605, .915
Model fit stats.								
F-value	2.034*		35.763***		4.264***		93.556***	
R <sup>2</sup>	.003		.161		.171		.447	
$\Delta R^2$	.003		.158		.010		.275	
Durbin Watson							1.519	

Table 5: Hierarchical Regression Results with Tax Audit Effectiveness (TAE) As Dependent Variable

Note: \*\*\*  $P < .01$ , \*\*  $P < .05$ , \*  $P < .10$ , ORG = Organizational Factors, AUD = Tax Auditor Factors, REG = Regulatory Factors, PQU = Professional Qualification, EXP = Years of Experience

## 5. Results and Discussion

This study has established very interesting outcomes. It has been discovered that organizational factors significantly and positively influence the effectiveness of tax audits in Ghana. This has led to the acceptance of the first hypothesis of the study, which indicates that organizational factors significantly and positively influence tax audit effectiveness. This outcome falls in line with the theoretical position of the contingency theory that suggests the likelihood of a significant positive link between organizational factors and tax audit effectiveness. The discovered relationship between organizational factors and the effectiveness of tax audits is also supported by various outcomes in the empirical literature. Comparatively, the results of Melat (2016) support this finding since it indicates that organizational features such as management support and quality systems within tax administration establishments have a considerable impact on the effectiveness of tax audit activity. Mihret (2011) also report that organizational characteristics have a substantial impact on the success of tax audits, thus, supporting the result of this study that organizational factors significantly influence tax audit effectiveness. Consistent with the aforementioned results, the results of Supriyatin et al. (2019) also support this outcome of the study since it reveals that organizational characteristics have a major impact on the success of tax audits. However, the result of Ayalew (2014) is inconsistent with this finding since it establishes that organizational factors exert no substantial impact on the success of tax audits. Apart from these comparative discussions that are in support of this outcome, it is important to indicate that the result can be deduced logically in a well-functioning institutional or organizational setting where there are maximum quality systems and structures coupled with a high level of management support a recipe for success in every organization activity. Hence, tax audit activity will undoubtedly thrive well and become effective when such organizational qualities are held in high esteem within tax administration bodies, including the GRA.

The study also finds that tax auditor factors do not exert any significant influence on tax audit effectiveness. This led to the rejection of the second hypothesis that tax audit factors significantly and positively influence tax audit effectiveness. The result disagrees with the theoretical position of the agency theory that tax auditors serve as agents for the government to enhance tax compliance for increased revenue mobilization. Compared with empirical literature, this result is inconsistent with Ayalew (2014), who concludes otherwise that tax auditor factors have a substantial influence on tax audit effectiveness. Again, Supriyatin et al. (2019) do not support this finding because tax auditor factors exert a major impact on tax audit effectiveness. Indeed, this outcome is interesting, as one would expect tax auditors to play a major role in enhancing the effectiveness of the tax audit process. As illogical as the result may sound, there is the tendency that the tax audit function within the GRA is well positioned and provides the needed resources to enhance effective tax audit activity, as well as other possibilities that impede the work of the tax auditors within the GRA.

Furthermore, the study indicates that regulatory factors have a significant and positive influence on tax audit effectiveness. This outcome is aligned with the theoretical position of the theory of economic regulation. With regard to the empirical literature, it is important to indicate that Muhammad (2013) supports this result as he established in his study that regulatory factors largely impact the success of tax audit activities. Also, Drogalas et al. (2015) and Chalu and Mzee (2018) report consistent findings with this result that regulatory factors have a significant positive effect on tax audit effectiveness. Departing from the comparative discussion, it can be logically deduced that an effective regulatory framework is critical for the effective functioning of systems and institutions of which tax administration institutions, such as GRA, within which tax audit manifest is no exemption. Therefore, establishing and enforcing a practical regulatory framework is key to achieving an effective tax audit process for enhanced tax compliance that translates into enhanced tax revenue mobilization.

## 6. Conclusion

The role of tax auditors in enforcing tax compliance that helps increase tax revenue mobilization is indisputable in any economy. To execute their work as agents of governments in detecting non-compliance to taxes, there ought to be

certain elements in place to cushion tax audit activities for effective performance. This study explores the factors that account for tax audit effectiveness within the context of Ghana. It uses tax auditors of the DTRD of GRA as its population, out of which 205 respondents are sampled using the stratified sampling method. The survey is conducted to obtain primary data by distributing a structured research questionnaire to respondents. A hierarchical regression analysis was adopted to analyze the data obtained using SPSS. It emerges that organizational factors and regulatory factors are significant predictors of tax audit effectiveness. However, tax auditor factors emerge to have no significant influence on tax audit effectiveness. Thus, it is concluded that organizational and regulatory factors are major determinants of tax audit effectiveness, but tax auditor factors are not.

Undoubtedly, this study extends the literature on tax audit effectiveness and its determining factors, especially with respect to developing contexts like Ghana. The study has implications for the government, policy-makers, and tax administrators (especially in Ghana) since it delves into the major factors that enhance effective tax audits that are crucial for revenue mobilization. It is recommended that revenue authorities like the GRA continually enhance their organizational arrangements and management support so they can promote effective tax audits. The government and policy-makers are also advised to ensure that regulatory guidelines on taxation are strengthened so that they can help improve tax audit effectiveness for increased tax revenue. Again, the GRA must ensure that appropriate tools and training are given to the tax auditors to help them in their work. Moreover, tax auditors are advised to improve their competencies via professional training to be ahead of time and remain relevant in the tax audit domain.

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