

Tax Audit, Tax Penalty and Tax Compliance: A Case Study of Pakistan

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Abstract

Taxation is the backbone of an economy. Thus, an effective tax collection system is crucial for developing a country. The primary objective of this study was to investigate how tax audits and fines affect taxpayer compliance, especially in Pakistan's socioeconomic environment. To accomplish the goal of this study, 400 instruments were distributed among Pakistani citizens who were actual or potential taxpayers using the convenience sample approach. A total of 247 instruments were deemed suitable for analysis. Employing Partial Least Squares Structural Equation Modeling (PLS-SEM) using SmartPLS software, the study's measurement model was analyzed. The study's model was also evaluated for its ability to produce precise forecasts. The results showed a clear relationship between tax compliance, tax audits, and tax penalties. The study's findings demonstrated that tax audits had less effect than tax penalties. The deterrence theory regarding tax compliance was examined in this work. The suitability of employing PLS-SEM as a statistical technique to investigate the associations above was also discussed. Finally, the study has many theoretical and practical implications. For instance, apart from addition to the current literature stockpile, lawmakers and tax authorities may make effective policies in light of recommendations. In light of the study's suggestions, governments may develop strategies to promote tax compliance among the general population.

Keywords: Tax Compliance, Tax Audit, Tax penalty, Deterrence Theory

Introduction

Taxation is a significant factor that governments consider when making financial decisions. (Gilligan & Richardson, 2005; Hanlon et al., 2015). Tax collection is the backbone of public finance projects, such as developing and maintaining infrastructure and providing the general public with necessary facilities and amenities. This spending is essential for the economic growth of a country (Alm & Torgler, 2006; Gangl et al., 2016; Miskam et al., 2013). Therefore, researchers have focused on tax compliance thanks to its significance and active role in financial development (Alon & Hageman, 2013; Andreoni et al., 1998; Khlif et al., 2016; Torgler & Schneider, 2007; Torgler et al., 2010).

Even developed countries still need one hundred percent tax compliance despite being essential. This is because a fraction of the wealthy and powerful public is considered 'hard to tax.' This fraction always tends to evade or avoid the disposal of the actual tax liability through different sinister means, such as under-declaration of the wealth and wrong calculation of the tax liability (McGee et al., 2008). Therefore, tax evasion and avoidance exert an adverse effect

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on the economy, especially keeping in view the fact that tax noncompliance is such a significant issue worldwide that the actual volume of the tax money evaded is a colossus (Farrar et al., 2019). Precisely, it was assessed that the amount of tax avoidance and evasion in the US surpassed 3.1 trillion Dollars (Murphy, 2011).

Today, the fluctuating oil prices and the shifting of the world's energy needs towards green energy sources have forced the Arab countries to think of alternate revenue sources, especially taxation, to overcome the gigantic budgetary deficits (Alm, 2019). Randle (2016) indicated that under-calculating tax liability and avoiding tax liability through other illegal measures cost the government billions of dollars annually. As a necessary result of tax evasion, the burden is ultimately put on the general public, which faces compromise on quality service delivery and many essential public benefit projects. Hence, to act in more considerable public interest, governments must combat the tax noncompliance tooth and nail (Feld & Schneider, 2010; Zhang et al., 2016).

Furthermore, the non-compliance with tax obligations leads to monetary expenses and imposes hardships on governments. Undoubtedly, its existence holds significant relevance to several fundamental matters within the field of public economics. A necessary consequence is the reduction in tax revenues, which subsequently impacts the tax burden on law-abiding taxpayers and the delivery of services to citizens (Alm, 2012). Failure to comply with tax legislation results in an imbalance between individuals who adhere to the regulations and those who do not since it transfers the responsibility of paying taxes onto the former group. Consequently, this disparity creates an incentive for increased occurrences of noncompliance with the regulations (Feinstein, 1991).

The practice of firms evading regulations and diverting resources into useless endeavors, such as the establishment of financial holdings to conceal tax avoidance, leads to a decrease in production. Noncompliance with rules can hinder economic advancement by impeding the government's ability to effectively provide essential public services, build infrastructure, and foster the growth of human resources (Johnson et al., 2000). To address this problem, the government must commit resources to discovering cases of non-compliance, assessing the extent of the issue, and implementing penalties on persons engaged in such behavior (Alm, 1999).

In the end, it impacts the precision of macroeconomic forecasting. For a comprehensive understanding of the actual ramifications of taxation, it is crucial to acknowledge tax evasion as a prominent concern (Alm, 2018). Hence, governments attach great significance to enhancing tax compliance as they rely primarily on tax revenue to finance a substantial portion of public expenditure (Chung & Trivedi, 2003). Consequently, governments and academic scholars have devoted considerable attention to tax avoidance (Lee, 2017).

The scholars have extensively analyzed many factors that might deter individuals from engaging in tax avoidance. Tax audits are considered significant and crucial in this particular situation. A tax audit is an organized investigation and evaluation of self-assessments of tax, accounting records, vouchers, invoices, and other pertinent documents to ascertain the precise and fair amount of tax that an individual owes. In Pakistan, a tax audit can be classified as either a limited audit, which involves a less extensive review, or a complete audit, which includes full investigations, by the Income Tax Ordinance 2001 (Section 177). Audits are often regarded as the most effective weapon in the arsenal of tax authorities in their fight against tax evasion and avoidance (Harelimana & Nyabirande, 2018; Jackson & Milliron, 1986).

In contrast to a standard company audit, where the auditor may not aggressively investigate any suspicious behavior in an individual's financial matters, a tax officer is far more inclined to discover instances of tax avoidance or evasion and issue a notice of tax demand that may be enforced (Chau & Leung, 2009). Consequently, an increased frequency of tax audits correlates with a higher probability of tax conformity. Allingham and Sandmo (1972) conducted

pioneering research on the association between tax audits and tax evasion. The study's findings revealed that tax auditing significantly and positively impacted tax compliance. Subsequent inquiries conducted by Feld and Larsen (2012), Alm and McKee (2006), Chung and Trivedi (2003), and Witte and Woodbury (1985) have uncovered similar findings. Interestingly, some prior studies have also demonstrated that tax audits significantly adversely impact tax compliance (Feld & Frey, 2007; Mittone, 2006; Slemrod et al., 2001). Nevertheless, two previous studies conducted by Spicer and Thomas (1982) and Wärneryd and Walerud (1982) failed to find indications that tax audits influence tax compliance.

Additionally, penalties serve as a vital factor in promoting tax compliance. A penalty, as defined by the Income Tax Ordinance 2001, is the application of a default surcharge, OK, and a mark of lien on the bank accounts of individuals who do not adhere to tax laws and participate in tax avoidance and evasion practices, as outlined in section 182 and other pertinent sections of the Income Tax Ordinance, 2001. The study by Allingham and Sandmo (1972) showed that tax penalties significantly impacted tax compliance. Several further studies, such as Thiga and Muturi (2015), Fischer et al. (1992), and Witte and Woodbury (1985) have found that tax penalties have a significant effect on tax compliance.

Multiple studies have shown that tax penalties negatively affect tax compliance (Feld & Tyran, 2002; Fjeldstad & Semboja, 2001; Martinez-Vazquez & Rider, 2005). Nevertheless, previous research has shown that tax penalties have a negligible effect on tax adherence. Collins and Plumlee (1991), Mohdali et al. (2014) and Pommerehne and Weck (1996) found that sanctions were ineffective in significantly eliminating tax noncompliance.

Overall, it is clear that, in Pakistan, the allocation of public funds is mainly determined by tax collection, which is essential for shaping the budgets for the public sector. Tax income of Pakistan for the latest fiscal year 2022-2023 was Rs. 7,169 billion (DGRA, 2023). Despite the recent endeavors of the Pakistani Government to augment domestic revenue through diverse fiscal measures, Pakistan continues to grapple with a substantial issue of tax non-compliance. As the Express-Tribune (2023) reported, tax dodging resulted in an estimated annual loss of around Rs. 1 trillion.

Ultimately, it is imperative to emphasize the necessity for further inquiry into tax compliance. Therefore, the study aimed to investigate the influence of several factors on tax compliance, including tax audits and tax penalties. The study examined the elements above within the sociocultural context of the Islamic Republic of Pakistan.

This work significantly enhances the existing understanding of taxation. This study provides empirical evidence of the application of deterrence theory to improve tax compliance in the socio-economic context of Pakistan. Previous research has investigated the elements that influence tax compliance by including many pertinent criteria within the framework of deterrence theory (Ariel, 2012; Verboon & van Dijke, 2012). Nevertheless, the existing models still need to elucidate the phenomenon of the said disobedient behavior fully. According to Wenzel (2004), societal variables significantly impact the efficiency of deterrent methods. This study examines the use of deterrence theory in Pakistan's tax compliance. More comprehensive research is needed on the main factors that significantly influence tax compliance among taxpayers in Pakistan, specifically regarding tax fines and adherence to tax legislation. Contemporary tax literature highlights the need to research the determinants that impact tax compliance in Pakistan. Recognizing that previous studies on these matters have generated contradictory findings is crucial.

In summary, many models have yet to successfully provide a comprehensive explanation for noncompliance behavior. The remaining article is ordered as follows: The second section thoroughly examines existing literature and the formulation of hypotheses. Section three offers an extensive and meticulous elucidation of the methodology and design. The findings are

presented in the fourth section based on the data analysis. Section five comprises analysis and interpretation. The sixth section presents a conclusive analysis of the findings.

Review of Literature

Tax Compliance

Every country in the world has unique tax policies and regulations tailored to fulfill its community's needs and suitability. The presence of these inconsistencies renders the task of formulating a globally accepted operational definition of tax compliance exceedingly challenging. Tax compliance is often seen when people willingly adhere to their tax duties. This compliance might be either obligatory or optional. Tax non-compliance refers to the deliberate failure of a taxpayer to comply with tax regulations and fulfill their responsibility to pay the designated amount of taxes. This absence of participation may be intentional. James and Alley (2002) defined tax compliance as the extent to which a taxpayer is committed to fulfilling the goals and objectives of society and the government concerning enforcing tax laws. Tax compliance may be classified into three distinct categories: capitulated compliance, innovative compliance, and committed compliance. Committed compliance means taxpayers voluntarily and cheerfully fulfill their tax obligations without expressing dissatisfaction or objection. Capitulated compliance is when taxpayers surrender to the authority and meet their tax obligations. Creative compliance refers to the deliberate actions to minimize tax obligations while staying legally upright (McBarnet, 2009). The aspects above illustrate that a taxpayer's commitment results in voluntary compliance, but successful penalties and audits work as mechanisms for enforced compliance (Kirchler et al., 2008).

The present study regards tax compliance as the dependent variable. The eagerness of taxpayers to pay taxes voluntarily affects their behavioral intent to fulfill their tax responsibilities. Voluntary tax compliance is a notion strongly linked to tax morale. Compliance of taxpayers means the extent to which taxpayers are ready to dispose of their tax obligations due to their moral responsibility towards the general public (Wahl et al., 2010). This attitude pertains to a tax compliance mindset that is nurtured by those who are self-motivated. Enforced tax compliance is using coercive tactics by tax authorities to enforce adherence to tax laws through the state's legal system.

Studies on tax compliance indicate that effective tax collection requires the application of coercive power and authority, persuasive techniques, moral principles, and a view of the tax system's equity (Kessler, 2016).

Nevertheless, a divergence of opinion exists regarding the determinants that prompt individuals to either comply with or avoid paying taxes. Deterrence theory was one of the original methods to explain tax compliance behavior (Jackson & Milliron, 1986). The theory of deterrence suggests that the fear of getting caught is a more effective deterrent for illegal action than the severity of punishment. Furthermore, research indicates that increasing the perception of the probability of being apprehended reduces crime rates (Becker, 1968). Becker's model laid the groundwork for advancing deterrence theory in the economics of crime. He suggested that evaluating tax noncompliance should consider characteristics such as the frequency of audits and the severity of fines.

Tax Audits

Tax audit means methodical examination and evaluation of self-assessments of tax, accounting records, vouchers, invoices, and other pertinent documents to determine the amount of tax an individual owes accurately. In Pakistan, a tax audit can be classified as either a desk audit, which is less extensive, or a complete audit conducted under section 177 of the Income Tax Ordinance 2001, which requires in-depth investigations (Ordinance, 2001). Tax authorities rely

on tax audits as their primary method to tackle the problem of tax evasion and avoidance (Harelimana & Nyabirande, 2018; Jackson & Milliron, 1986).

Unlike a standard business audit, which may not specifically focus on investigating questionable financial activities, the primary goal of a tax officer is to detect cases of tax avoidance or evasion and initiate a request for the repayment of unpaid taxes (Chau & Leung, 2009). Therefore, an increase in the frequency of tax audits results in a proportionate increase in tax compliance. Allingham and Sandmo (1972) investigated the relationship between tax audits and tax evasion. The study's findings revealed that tax audits significantly and positively affected tax compliance. Additional inquiries, carried out by Feld and Larsen (2012), Alm and McKee (2006), Chung and Trivedi (2003), and Witte and Woodbury (1985), yielded comparable findings. In contrast, numerous research studies have indicated that tax audits significantly negatively affect tax compliance (Feld & Frey, 2007; Mittone, 2006; Slemrod et al., 2001). Nevertheless, a limited amount of previous research, such as the studies conducted by Spicer and Thomas (1982) and Wärneryd and Walerud (1982), has also arrived at the same conclusion that there is no empirical evidence to substantiate the notion that tax audits have any impact on tax compliance.

Prior studies have investigated the effectiveness of tax audits concerning various types of taxes. (Sinnasamy & Bidin, 2017a) Found that tax audits effectively reduce the avoidance of excise duty, particularly Federal Excise Duty (FED). Miskam et al. (2013) conducted a study that demonstrated a significant adverse effect on avoiding excise duty resulting from the lack of a tax penalty. According to Woodward and Tan (2015), tax audits have increased compliance. However, several other scholars, such as Faridy et al. (2014) and Johnson et al. (2010), have differed with the idea that there is a significant correlation between tax audits and tax compliance.

As apparent from the above discussion, prior research has yielded inconclusive results in tax audit literature. Therefore, the literature needs to have uniform evidence regarding the influence of tax audits on fostering tax compliance, especially in Pakistan. Thus, the researchers concluded the following hypothesis due to the cited disagreement:

H1: Tax audits affect tax compliance significantly.

Tax Penalty

Penalties are vital in ensuring efficient enforcement of tax laws and are a significant instrument for tax authorities to combat tax fraud (Chau & Leung, 2009). Therefore, measures such as sanctions, surcharges, fines, and penalties are frequently used to prevent the infringement of tax regulations. However, despite their effectiveness, this strategy is extremely costly (Dunn et al., 2018).

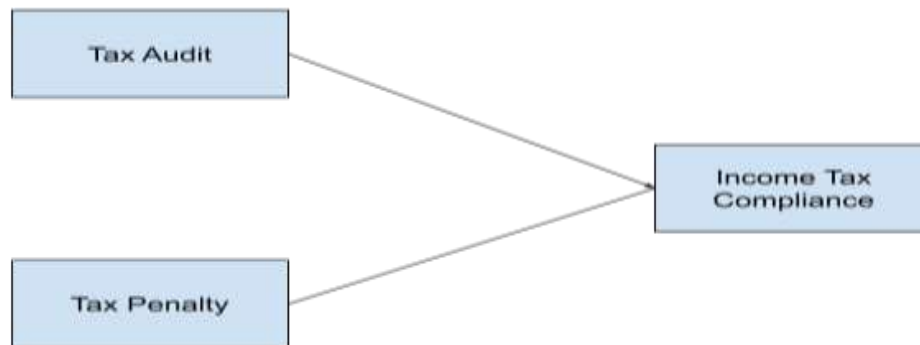
According to the Income Tax Ordinance 2001, a penalty refers to imposing extra costs and fines and marking lien on the bank accounts of persons who do not follow tax regulations and indulge in tax evasion and avoidance (Ordinance, 2001). Detailed rules about penalties are encompassed in section 182 of the Income Tax Ordinance, 2001. Allingham and Sandmo (1972) provided compelling data indicating that tax penalties substantially impacted tax compliance. Subsequent research has demonstrated that penalties significantly and favorably impact tax compliance. For example, Thiga and Muturi (2015), Fischer et al. (1992), and Witte and Woodbury (1985) have all found empirical evidence that supports this association.

Conversely, other studies (Feld & Tyran, 2002; Fjeldstad & Semboja, 2001; Martinez & Rider, 2005) have also discovered that tax fines negatively affect tax compliance. However, prior studies have demonstrated similar findings, suggesting that penalties exert an insignificant impact on compliance with tax laws (Collins & Plumlee, 1991; Mohdali et al., 2014; Pommerehne & Weck, 1996). Nevertheless, Sinnasamy and Bidin (2017b) discovered that fines had a notable and beneficial impact on decreasing noncompliance with federal excise

duty (FED). Various researchers, such as Woodward and Tan (2015) and Webley, Adams, and Elffers (2019), have discovered that penalties favor compliance with tax laws. Nevertheless, many researchers, like Faridy et al. (2014), found no significant correlation among these variables. In conclusion, researchers have not agreed on the effect of penalties on tax compliance. Hence, it was deemed crucial to determine the extent to which this relation existed while examining the tax culture of Pakistan. The above discussion led the researchers towards the second hypothesis of the investigation:

H2: There exists a significant effect of tax penalties on tax compliance.

Figure 1: Conceptual Framework



Source: Authors' design

Methodology

The researchers employed a closed-ended structured questionnaire adapted to suit the specific circumstances of Pakistan to collect data from the intended participants. Table 1 shows the items and their source regarding the endogenous and exogenous variables of the study. Demographic variables of the study were gender, age, level of education, registration with the FBR, Pakistan, and filing status, which refers to whether an individual is a filer or a non-filer. The study population contained two groups: actual taxpayers, who registered with the FBR and possessed a valid National Tax Number/NTN, and the potential taxpayers, who were individuals not registered with the FBR and lacking a valid National Tax Number/NTN.

It is reported that a mere 4.2 million individuals submitted their income tax returns regarding the latest tax year, 2023 (Sarfraz, 2023). Due to the time-consuming and expensive nature of collecting fresh hand responses and the significant level of accessibility required, the convenience sampling technique was chosen to administer the questionnaire. The convenience sampling technique is deemed appropriate in situations with limited time, cost, and accessibility or outreach (Denscombe, 2009). The assertion above is supported by several comparable studies (Carsamer & Abbam, 2020; Mohdali & Pope, 2014; Nkundabanyanga et al., 2017; Yuniarta & Purnamawati, 2020).

Four hundred questionnaires were distributed, of which two hundred and eighty-six responses were received. Upon conducting a more thorough examination, two hundred and forty-seven responses were considered fit for the study. This finding showed a sixty-two percent response rate. One potential bias in the questionnaire's design was the respondents' ability to accurately envision tax compliance based on the wording used in the measurement tool. Therefore, the study underwent pilot testing to incorporate several crucial aspects into this research. These include the opportunity to eliminate ambiguity and enhance the clarity of certain instrument items, as well as the ability to make any required modifications as the pilot testing suggested. Furthermore, the questionnaires were distributed among six individuals with expertise in tax accounting within the academic community, three who hold business owner-managers

positions, and ten tax authorities in Pakistan. The tax authorities included officers ranging from inspectors to deputy commissioners, additional commissioners, and commissioners of inland revenue. These respondents were requested to review the questionnaire and give their feedback, which was used to enhance the accuracy, and the items underwent evaluation to identify any potential construction faults, assess the flow of the content, detect ambiguity, and examine the sequencing of the information. Subsequently, the questionnaire underwent necessary revisions. In addition, participants were given guarantees about the secrecy of their comments and their cooperation to guarantee the dependability of their thoughts. Furthermore, the questionnaire clarified the study's uses and goals to promote a sense of honesty among the participants, motivating them to provide truthful answers.

The questionnaire consisted of questions and statements with predetermined answer options and did not include any questions about demographic information. The researchers employed a five-point Likert-type scale to evaluate the dependent and independent variables. The single factor test of Harman was used to evaluate the possible presence of common technique bias (Podsakoff et al., 2003). The unrelated factor analysis approach included all variables. The findings indicated that the data had a complex structure influenced by several factors and a restricted common bias.

Table 1: Variables Measurement

Name of variable	Basis
Tax Compliance (TC)	Wahl et al. (2010)
Tax Penalty (TP)	Braithwaite (2004)
Tax Audit (TA)	Faridy et al. (2014)

Source: Authors' design

Measurement

The operational definition of the three factors analyzed in this study were obtained from prior literature. The criteria were assessed using a Likert-type scale including five points. The participants were instructed to indicate their choices on a scale that ranged from "1" (representing strong disagreement) to 5 (indicating strongly agree). Three items of tax audit came from Faridy et al. (2014). According to Braithwaite (2004), the tax penalty was comprised of four components. Similarly, the evaluation of tax compliance comprised ten items that were adapted from Wahl et al. (2010). Table 1 presents a comprehensive overview of the measurement of the variables under investigation.

Data Analysis

The present study employed a causal-comparative model, which included regression analysis. Researchers, including Maine et al. (2022) and Ponomareva et al. (2020), have chosen to employ linear regression analysis. The study utilized the Partial Least Squares Structural Equation Modelling (PLS-SEM) analytical technique to examine the hypothetical relationships and assess the study's model. Partial Least Squares Structural Equation Modeling (PLS-SEM) is a statistical technique that is increasingly acknowledged and employed by academics to evaluate empirical data in various academic domains including tax compliance Farouk et al. (2018). PLS-SEM enables simultaneously analyzing many relationships (Ringle et al., 2012). Partial Least Squares Structural Equation Modelling (PLS-SEM) is a suitable approach for analyzing intricate models that encompass a significant number of components, variables, and connections (Chin, 2010). Moreover, it is essential to recognize that PLS-SEM has the potential to assess datasets with a limited number of samples (Hair et al., 2014).

According to Hair et al. (2014), the normal distribution is not statistically significant in PLS-SEM. However, it can still be advantageous in some situations where other approaches are not practical. Additionally, it is worth noting that PLS-SEM follows a two-stage process. This process involves the utilization of the measurement model, commonly known as the outer model, and the structural model, also called the inner model. The external model assesses the dependability and accuracy of the constructs and indicators, whereas the internal model examines the importance of the claimed correlations.

Table 2: Convergent validity and reliability assessment

Variable	Item	Loadings	CA	CR	AVE				
Tax Compliance (TC)	TC1	0.827	0.831	0.868	0.671				
	TC2	0.816							
	TC4	0.835							
	TC5	0.747							
	TC6	0.593							
	TC8	0.878							
	TC9	0.795							
	TC10	0.817							
	Tax Penalty (TP)	TP1				0.668	0.775	0.818	0.704
		TP2				0.619			
TP3		0.776							
TP4		0.831							
Tax Audit (TA)	TA1	0.583	0.712	0.799	0.598				
	TA2	0.881							
	TA3	0.618							

Note: TC3 and TC7 were dropped because of low AVE

Source: Authors' calculations.

The evaluation of the measuring model in this study was conducted by considering both convergent validity and discriminant validity. Convergent validity refers to the degree to which the measures used to evaluate variables accurately and consistently represent those characteristics; and are able to show positive relationships with other measures of the same variables (Hair et al., 2014). The assessment of convergent validity involved analyzing the loadings of indicators, the composite reliability, and the average variance extracted (AVE). The data presented in table 2 demonstrates that the loadings of the indicators, as well as the values of Cronbach's alpha (CA) and composite reliability (CR), above the minimum thresholds of 0.40 and 0.70, respectively (Hair et al., 2014).

Nevertheless, the study removed two tax compliance items (TC3 and TC7) in order to improve the composite dependability since their indicator loadings were lower than the acceptable threshold. Furthermore, the guideline suggested by Kenny (1979) and Kline (2023) on the optimal number of items, especially a minimum of two items, was followed. This criterion remained valid even after excluding specific components, as all structures still comprised a minimum of three things. Thus, it may be inferred that the study produced good outcomes in relation to convergent validity.

Once the convergent validity was confirmed, the subsequent stage was examining the discriminant validity using Fornell-Larcker's criterion, as recommended by Hair Jr. et al. (2014). The discriminant validity of the latent contracts was assessed by examining the square roots of the average variance extracted (AVE) and the correlation coefficients between variables. Table 3 demonstrates that the square roots of the average variance extracted (AVE)

values exceeded the diagonal values in both the corresponding rows and columns. This demonstrates the existence of discriminant validity when examining individual variables. In summary, it can be inferred that the measurement model has successfully met the criteria for reliability, as well as convergent and discriminant validity, at both the indicator as well as the variable levels.

Table 3: Discriminant validity assessment

	TC	TP	TA
TC	0.820		
TP	0.034	0.840	
TA	0.173	0.251	0.773

Source: Authors' calculations.

The PLS-SEM approach was used to assess the measurement model, with the goal of determining the R² value and analyzing the degree to which the exogenous variables explained the variation. The R² value measures the proportion of the variability in the dependent variable that can be explained by one or more independent variables (Hair et al., 2014). The R² value of 0.133 suggests that tax audits and fines may account for a substantial portion of the variation in tax compliance. This finding suggests that the combined effect of tax audits and tax fines could account for a substantial amount of the variation in tax compliance.

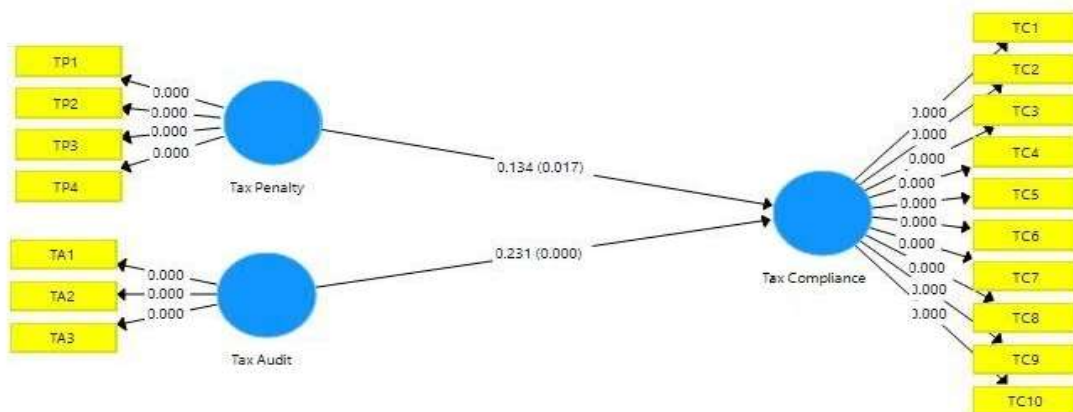
The primary aim of the structural model test was to evaluate the impact of the exogenous variables on the endogenous variable. The bootstrapping method was used to determine the statistical significance of the route coefficients. This required generating five thousand samples. Table 4 and Figure 2 display the β-values, t-values, and p-values corresponding to each submitted hypothesis. The data presented in Table 4 demonstrate a significant positive relationship between tax compliance and tax audit (β = 0.231, t = 3.786, p < 0.01), as well as tax penalty (β = 0.134, t = 2.394, p < 0.05). The findings from the bootstrapping analysis offer support for hypotheses H₁ and H₂, as evidenced in table 4 and figure 2.

Table 4: Results of hypotheses testing

Hypotheses	Paths	Coefficient	t value	p value	Decisions
H ₁	TA -> TC	0.231	3.786	0.000**	Supported
H ₂	TP -> TC	0.134	2.394	0.017*	Supported

Notes: *: p < 0.05; **: p < 0.01

Figure 2: Partial least square boot strapping



Source: SmartPLS output

Q^2 's predictive relevance is the subject of the second query. Joseph et al. (2010) recommended that in order to evaluate the quality of a PLS-SEM model, researchers should employ measures that show how effectively the model predicts outcomes. Blindfolding is a technique proposed by Sattler et al. (2010) to assess the structural model's prediction accuracy (Q^2). According to Joe et al. (2011), a high value of Q^2 indicates that the model in study has demonstrated significant predictive capability. Cross-validation redundancy measure was determined for the endogenous variable as 0.084 using the specified criterion. According to the data shown in table 5, this number indicates that the model is of significant predictive value.

Table 5: Q^2 of the constructs

Latent/ Endogenous variable	SSO	SSE	1-SSE/SSO
Tax Compliance	1376.001	1262.042	0.084

Source: Authors' calculations.

Findings and Discussion

The main aim of this study was to examine the relationship between tax audits and penalties for tax compliance. As previously mentioned, the results demonstrate that tax audits substantially positively impact tax compliance. This finding aligns with prior studies that have underscored the significant positive role of tax audits in fostering tax compliance, for instance, Harelimana and Nyabirande (2018) and Jackson and Milliron (1986). Allingham and Sandmo (1972) discovered a direct correlation between the frequency of tax audits and the extent of tax compliance. Feld and Larsen (2012), Witte and Woodbury (1985), Alm and McKee (2006), and Chung and Trivedi (2003) have previously reported identical findings.

A possible deduction may be that the taxpayers thoroughly examined the expenses linked to incurring fines and undergoing an audit and the difficulties associated with the audit proceedings. Furthermore, one may argue that the underlying reason for this occurrence is the anxiety individuals may have about the start of tax audits carried out by tax authorities, which rely significantly on these audits to generate revenue. Typically, the primary tactic to deter noncompliance is to incite fear through procedures that raise the possibility of tax audits (Forest & Sheffrin, 2002). Therefore, the findings show how important it is to prioritize and improve how audit protocols are carried out and enforced regarding tax submission.

Results of the current study offer empirical evidence that supports the theoretical hypotheses proposed by Allingham and Sandmo (1972) in the realm of the deterrence theory. The researchers aimed to establish a link between tax penalties and audits and assess their influence on tax compliance. Statistical modeling has determined that taxpayers can either fully disclose their taxes or elect not to do so. The outcomes of the current investigation show that implementing tax penalties improved tax compliance. The levying of tax fines is widely acknowledged as essential for evaluating and encouraging tax-compliant behavior (Chau & Leung, 2009; Devos, 2013). The current study confirms the efficacy of fines in deterring tax avoidance in line with the findings of Mohdali et al. (2014). Multiple empirical research has consistently corroborated this discovery (Thiga & Muturi, 2015; Witte & Woodbury, 1985; Woodward & Tan, 2015).

Employing intimidation and dread can reduce noncompliance among taxpayers, motivating them to disclose their revenue in a veracious way correctly. This discovery sheds further light on the issue in Pakistani culture, where individuals arguably show a greater tendency to obey the law mainly due to the fear of possible sanctions and punishments—in addition to Pakistan, Alshira'h, and Abdul-Jabbar (2020) noted that implementing sanctions and coercion has significantly improved tax collection in Middle Eastern countries like Jordan. Consequently, improvements may be implemented by the tax authority to deter tax noncompliance effectively.

Governments possess the power to enforce penalties for cases of tax noncompliance in order to act as a strong deterrent. Nevertheless, it is essential for governments to thoroughly evaluate the possibility of misconduct by dishonest tax inspectors or disproportionately punishing taxpayers who have committed legitimate, inadvertent mistakes (Alleyne & Harris, 2017). The research identified statistically significant coefficients demonstrating a favorable association between tax compliance and tax penalties. This demonstrates the advantageous impact of penalties to encourage compliance with taxes, as these fines are enforced on persons who have erroneously disclosed their taxes. Consequently, implementing tax penalties leads to increased adherence to tax regulations. The results may not be unexpected, especially in the context of an Eastern country like Pakistan, considering the influence-driven socio-cultural structure of the nation.

Conclusion

While several scholars have extensively studied tax compliance, the underlying motivation for individuals' willingness to pay taxes remains enigmatic. Worldwide, governments prioritize maintaining tax compliance. Taxpayers must abide by tax regulations to promote economic growth and progress. However, the literature available needs to address the challenges related to tax compliance adequately. Research on tax compliance often investigates variables that enhance compliance and reduce noncompliance.

This study investigated any direct correlations between tax audits, tax penalties, and tax adherence. This study explores the relationship between the variables under investigation and can be regarded as an essential investigation conducted in Pakistan. This research aims to fill the existing literature gap regarding tax compliance. Due to the scarcity of tax compliance studies in this scenario, the findings hold significant relevance. The study's findings provide empirical proof that tax audits have a significant effect on improving tax compliance. The findings are consistent with research conducted by Jackson and Milliron (1986), Allingham and Sandmo (1972), Feld and Larsen (2012), Alm and McKee (2006), Chung and Trivedi (2003), Witte and Woodbury (1985), Harelimana and Nyabirande (2018), as well as other scholars. Furthermore, this study discovered a positive correlation between tax penalties and tax compliance, which is consistent with prior investigations undertaken by Chau and Leung (2009), Witte and Woodbury (1985), Woodward and Tan (2015), Devos (2013), and Thiga and Muturi (2015).

The results of this study have significant implications, particularly for lawmakers and tax authorities responsible for formulating and implementing tax legislation. Thus, in addition to adopting cooperative remedial action, tax authorities must prioritize raising operational inspections to enhance tax inspectors' efficiency. It is pertinent to recommend that tax authorities conduct audits of taxpayers and impose suitable fines to force them to fulfill their tax obligations honestly and ethically. As supported by the study's suggestions, governments may develop strategies to promote tax compliance among the general population.

Finally, it is helpful to provide some avenues as well as suggestions for future research:

1. The study utilized convenience sampling to choose the sample. Though justified, future research endeavors may employ an alternative sample methodology, such as probability sampling.
2. Due to the potential disclosure of damaging information and the delicate nature of tax issues, the study concentrated on evaluating actual behaviors rather than people's intentions. Future research should include assessing people's behavioral intentions about tax compliance. While this study offers a theoretical foundation for future investigations, future studies may be conducted in other countries or regions.

3. In future investigations, it is recommended that the existing model be improved by incorporating additional elements, such as the cost of tax compliance, financial position, and patriotism, to analyze their relationship with tax compliance.

The study framework provides a basis for future research, broadening its significance and promoting a more thorough investigation of individuals' viewpoints and feelings on the subject under study. This technique can also help identify inconsistencies in the perspectives and understandings of the dominant social institutions, hence maintaining power dynamics between taxpayers and tax officials. Future research efforts have the opportunity to improve and confirm the relevance and accuracy of these results by implementing them in other scenarios.

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