

# Investigation on Corporate Tax Avoidance through GMM: A Fresh Insight on PSE Listed Companies

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## Abstract

**Purpose:** The purpose of this study to investigate corporate tax avoidance behaviors which increase the company value in Pakistan. Few studies take over empirical conduct for tax avoidance represents wealth transfer from government to companies that enhance the company value. This empirical work argues that contrast to developed countries, tax avoidance does not necessarily add value to opaque Pakistan companies relevant to transparent counterparts due to high level of agency costs.

**Design/methodology/approach:** First, the author of the study investigates the complete effect of tax avoidance regarding listed companies of Pakistan stock exchange in which the value of the companies increased that is illegal activity. Second, the author examines the relative opaque counterparts in which tax avoidance increase the value of the transparent companies. It is increased the uncertainty for the revenue of the government and decreases the tax collection amount. Third, the author used different perspectives to measure the corporate tax avoidance which is creating burden for the government of Pakistan. The time period 2012 to 2021 with fixed effect regression model indicates that there is a relationship between tax avoidance and value of the listed companies.

**Findings:** This study found that corporate tax avoidance reduces the tax burden that maximizes the shareholder's wealth. There is a relationship exist between tax avoidance and environmental uncertainty which does influence on reduction of tax payments to the government of the Pakistan.

**Practical implications:** The empirical work of Sikkas (2010, 2013) views that organized hypocrisy act that is committed by the listed companies in China in where companies are engaged for aggressive tax avoidance whose irresponsible and illegal activities for the avoidance of tax. Consequences indicted that listed companies of the Pakistan stock exchange and investors regarding financial tax conformity has effects on the avoidance of tax which is an illegal activity. It is reacting badly regarding financial considerations for the economy of Pakistan.

**Originality/value:** The consequences of the study indicate that tax avoidance is a crucial factor that influence the economy of Pakistan badly in which managers of the listed companies are gaining the encroached for their self-serving. Moreover, investors in Pakistan stock exchange are downplaying the significance regarding avoidance of tax with having the corporate information transparency that pertain the negative tone for the economy of Pakistan.

**Keywords:** Tax avoidance • Company value • Environmental uncertainty • Financial disclosure

## Introduction

Tax avoidance is a crucial corporate illegal strategy [1]. Traditionally, it is observed that corporate tax avoidance shows transfer of wealth from government to companies and it should make cause to enhance the value of the corporations. Nevertheless, avoidance of tax is not costless. Direct costs include reputation loss,

implementation cost and potential punishment, etc. The agency theorists demonstrated that all the activities relevant to avoidance of tax are intertwined with corporate governance issues. Opaque tax planning activities camouflage managerial rent diversion and it make decrease the value of the company [2]. Thus, whether listed companies are engaged in avoidance of tax to get benefits by means of outweigh costs. This study exerts the avoidance of tax literature by considering the influence of tax avoidance on the values of the listed

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companies in Pakistan unique institutional setting. We expect the relation of tax avoidance and value of the companies depend upon isolate levels of corporate governance.

Avoidance of tax generates company value which is crucial but under studied research question. Current empirical evidence regarding reactions of the investors to tax avoidance is mixed. The information content about tax avoidance suggests that income tax expense is a main factor for the profitability of the listed companies. Tax avoidance decreases the information content about income tax expense [3]. Desai and Dharmapala, found that overall exert of corporate tax avoidance activities on the value of the listed companies is not significantly different from zero. The positive influence generates only for those listed companies whose have high level of institutional ownership. Desai and Dharmapala, demonstrated that corporate tax avoidance has two indicators which contribute influence on the value of the listed companies. While it constitutes the transfer of wealth from government to shareholders as well the agency conflicts between outside shareholders and managers to upgrade the managerial diversion which is minus of the company value. Hanlon and Slemrod, furnish the market reactions to news about the involvement of tax shelter. They found confine range of evidence on cross-sectional variations of market reaction. Wang found that investors of the listed companies place a value premium on the avoidance of tax whereas the price premium decreases as corporate opacity increases.

Presumable, the inconsistent pattern of research findings may be partly due to isolate selection of factors of interest whose contribute towards current and future cash flows which ultimate company value and partly due to differences in the selection of sample and research perspectives. The former empirical evidence, in particular, tax avoidance can impose indirect and direct alteration on current and future cash flows. For instance, direct alteration includes tax avoidance which increases the cash flows by means of saving tax whereas it also associated with higher agency costs. On the other hand, aggressive avoidance of tax complicates the transactions of the business which lead the poorer information transparency and it make cause to low firm value in indirect way. The emergence of dominant influencing pertain depends on particular business operating environment.

In this study, we investigate the influence of corporate tax avoidance on the values of the listed companies of the Pakistan stock exchange because listed companies in Pakistan suffers the serious agency problems due to incapable corporate governance mechanism. Thus, Pakistan is an interesting setting to test the agency theory explanations of why avoidance of tax does not mandatory increase the value of the listed companies. Abdul and Holland, demonstrated that information transparency, make the grounds as the availability of particular information about listed company to those investors outside publically-traded companies, can function as good corporate governance to mitigate interest conflicts among the stakeholders.

Prior studies indicate that information transparency has direct influence on economic performance by disciplining corporate insiders for the best selection of investments, more effective management of assets in place and decrease the expropriation of minority shareholder's wealth [4]. The decision of business depends on quality and quantity of information which is most crucial pertains.

Thus, information transparency could shift future and current cash flows by means of influencing management decision making.

Domestic research suggests that information transparency is an important element for increasing the efficiency of the management compensation contract and converting securities analyst predicts characteristics [5]. Zhang, et al. found that there is U-shaped relationship between market value of the company and information transparency. The information transparency plays a vital role in the relation of tax avoidance and the value of the listed companies by alleviating agency severity.

The listed companies of the Pakistan stock exchange have not proper system for information disclosure, assessment and rating mechanism. In this study, collect a large number of sample of 279 financial listed companies (financial companies) observations from 2012 to 2021 with obtaining of annual avoidance of tax. This study also investigates the interaction between corporate transparency and avoidance of tax on the values of the listed companies as measured by Tobins Q. Lot of researchers found that tax avoidance is negatively and significantly associated with the values of the listed companies. In addition, more avoidance of tax activities is relevant to high range of agency costs which is measured by the ratio of period expenses to sale. This study contributes to agency literature on corporate avoidance of tax in Pakistan capital market setting. It furnishes the empirical evidence about shareholder's reactions to Pakistan stock exchange listed companies for the avoidance of tax.

## Literature Review

Tax avoidance is a conduct taken by management to decrease the effective tax rate on income before tax [6]. This study regarding tax avoidance has two different dimensions. The first step consists on tax avoidance with effective planning of tax by the management of the companies to make the value of the company for profit orientation means of saving the cash and divert the tax expense to make investments. The other aspect is that management takes tax avoidance to decrease the tax payments for the companies' benefits to give the bonuses and other compensation for management [7]. The uncertainty of environment is an external pertain that can effect tax avoidance. The uncertainty of environment exists due to changing the different patterns in business elements such as changes in consumption patterns in the competitive structure [8].

Agency theory furnishes the base for the avoidance of tax. Shareholders and managers are two prominent participants of the tax avoidance. Shareholders are willing to bear the low tax burden. In such a way, these are encouraging the managers to decrease the expenses of tax which is an illegal [9]. Crocker and Slemrod, investigated the tax avoidance which is illegal and elaborated that managers as well shareholders are main parties for the reduction of tax; however, the effective way is to make the strategies by the managers to increase the compliance because they can only take the action on behalf of shareholders.

The literature discusses the different techniques for the avoidance of tax to reduce the burden of tax expenses on temporary or permanent basis. In such a way, mangers are concerns to decrease the tax burden by means of misclassification and manipulation of different items of the financial reports like deferral and accrual strategies for the values of the expenses, revenues and

assets of the companies [10]. Slemrod and Yitzhaki, demonstrated that postponement and retiming of taxes, tax arbitrage across taxes and arbitrage across revenues are considering the sophisticated methods for the avoidance of tax.

Lot of studies explained that management considers the effective approaches to adjust in the changing environment by adopting efficient operations and strategy [11]. The most crucial prospect which is considered to adjust the structure of the operational cost. The explanation describes management discretion against the policies of the company which are based on the usage of the financial resources with taking tax costs. In time of reactions in terms of high uncertainty of the control system of the company, it shows the conditions that management take part in making effective decisions about the avoidance of tax [12]. It ensures the desired goals of the companies are achieved with maintaining the financial statements, free of material misstatements, complies with rules, laws or regulations or policies and consolidate the assets of the company [13]. This internal control is prevented in the eye of law but it detects intentional and unintentional mistakes made by the management. Few studies furnish empirical evidence in which internal control about financial statements show the behavior of the management in making and maintaining the financial information as well other relevant company policies [14].

## Hypothesis development

As for as Pakistan stock exchange environment is concerned, Bilquees, demonstrates that government mechanism regarding listed companies have major drawbacks of government intervention, poor legal protection to investors, controlling of majority of shareholders, lack of supervision and lack of external CPA governance. These pertains appear two agency problems. One exists between managers and shareholders which comprises on political instability that make cause severe agency problem in Pakistan. The second exists between controlling of shareholders whose have dominant personnel arrangement for the top management and board of directors in which they are engaged tunneling by means of relevant transactions. Jiang et al., found that tunneling itself show tax effect as well it decreases the value of the companies in long-term. Ahmed, suggested that all those areas relevant to taxation enforcement, are in weak control of shareholders which expropriate assets of the companies and consider relevant transactions that are doing negatively in Pakistan. This research explained enforcement of governance taxation mechanism. Zheng, et al. elaborated that all the large scale companies have corporate governance issues. Their study suggest it is mandatory to improve the external legal environment which signify decreases the agency costs relevant to listed companies and enforcement of taxation which can partially serve as corporate governance. As for as concern the information content regarding tax corporate income, tax expense which are viewed as a crucial pertains of profitability [15]. The effective planning of tax is also one factor which is affected positively or negatively by the behavior of the management. Discretion of facts gives permission to management for carrying out tax planning as much listed companies furnishes benefits to the investors ultimately [16]. Listed companies always tried their level best to show the significant book-tax differences that blend to manipulate for both aspects like tax estimation and bookkeeping [17]. Listed companies of Pakistan stock exchange also showed weaknesses of financial reports about internal control mechanism which creates tax differences [18].

Ahmed, furnished proof that adequate internal control decreases the tax avoidance in unethical manner. For the intention of avoidance of tax, few costs which are included. These costs are two major types. One is indirect costs and second is direct cost. Indirect cost has direct appropriation (only for the utilization by the managers of the listed companies), creditability loss concerned with the financial reporting, reputational cost as well possible sanctions by the authorities of the tax department [19]. While direct cost is concerned with the information of charges that are given to the individuals whose are engaged in the process of avoidance of tax and other relevant reorganized company charges that are mandatory to fulfill for the self-gain by the listed companies which is specified. According to existing arguments and literature review, the Pakistan institutional settings in the perspective of high better demonstrate basis of relationship between the tax avoidance and the value of the listed companies. The earnings performance of the listed companies has a positive impact on those companies whose have good performance, it would lead to create more good performance. If listed companies get attractive financial performance and have all those resources to absorb the risks, then their manager's activities could decrease their tax risk which is proposed in  $H_1$ . However, those firms with bad financial performance and utilization of inadequate economic resources, the manager's activities may not fulfill their intrinsic ethical value objectives. Instead, the activities will proceed only to disguise the negative effects for the performance of the listed firms. These predictions led the following hypothesis.

$H_1$ : Tax avoidance behavior is negatively associated with the performance of the company's as well value.

$H_2$ : Tax avoidance behavior increases the corporate agency costs.

In terms of agency perspective regarding the avoidance of tax, governance of listed company is a crucial determinant of the valuation of proposed corporate tax savings. The direct impact of avoidance of tax is to increase the after tax value of the listed companies and these influences are potentially offset specially in poor governed companies by means of increasing the opportunities for managerial diversion of rent. Thus, the net impact of the value of the company should great with the influence of strong governance institutions. The overall analysis explains that information transparency interacts with the avoidance of tax. With the combination of agency problems, information transparency is considering to mitigate the agency conflicts between the stakeholders to adjust the market value by means of future and current relevant cash flows regarding altering the management decision making and to discipline corporate insiders which is good way of decision about investments, more effective control, better management of assets in right place and low expropriation of the minority shareholders wealth. On the other hand, information transparency enables the business operations easier to reveal the avoidance of tax and companies value to Government. It creates the situation to make low capability of avoidance of tax by the listed companies of Pakistan stock exchange. So, information transparency is well manner to test the propositions of agency theory.

Listed companies of the Pakistan stock exchange are commonly considered for its well built prestige which is known as the crucial productive asset for listed companies. Listed companies make them exerts best for getting the positive word of mouth and struggle as much these companies can be building their reputation for enhancing the business.

Listed companies take over concerned decisions with proper survey of market analysis by keeping in mind about their reputation. These companies evaluate their decisions effects on their market reputation. The concerned reputation of the listed companies is totally depending upon the moral principal which companies follow their taking bad or good business decisions from time to time. Avoidance of tax from the listed companies is a moral decision by the listed companies that shown the negative ethics of the business. Thus, with the help of corporate governance, it can handle in best manner during the process of decision making which is considered good for the companies. In such a way, isolate issues can be resolved within the companies. Moreover, the knowledge framework showed the prospects which corporate governance is known as productive yield for the investor's interests. Good corporate governance finishes out lot of issues and mitigates the negative impacts. Openness and transparency are main concerns regarding Pakistan stock exchange listed companies. This study explains that information transparency is one way to improve the compensation of the managers concerns efficiently and securities analysts forecasting features. Zhang, et al. demonstrates that information transparency is a double-edged in which relationship exists between company market value and information transparency. This study considers that information transparency moderates the connection in terms of company value and tax avoidance. Based on these assumptions, we posit the following hypothesis:

**H<sub>3</sub>:** Relative to opaque counterparts, tax avoidance increases the company value for transparent companies.

### Objectives of the study

- To furnish information to investors and regulatory authorities of Pakistan about tax avoidance and its consequences.
- To identify which facts distinguish listed companies to avoid corporate tax.
- To examine whether the following potential determinants of corporate tax avoidance behavior are relevant in Pakistan corporate setting.
  - PPE (fixed assets).
  - Firm size.
  - Growth.
  - ROA.
  - DEBT (capital structure).
  - NOL (Loss carry forwards).

### Theoretical framework

Issues relevant to tax disclosure strategies and avoidance of tax are increasingly on worldwide level by regulatory bodies due to several fiscal policies which are created to react to major corporate scandals. Different agencies like the European commission, Non-Government Organizations (NGOs) and government meetings on countries level strive their best to prevent illegal tax avoidance practices and illegal strategies to reduce undue taxes employed by the listed companies [20]. This study presents the model for incorporating all those possibilities that manager and shareholders involved for the avoidance of tax with two intentions. These are synergy as well agency and both make cause for the occurrence of hubris. Few studies of corporate tax avoidance keep attentions towards stressed more individual's behavior rather than corporations.

Slemrod, investigated the compliance of corporate tax which is analyzed by keeping the effective planning system of tax by the government. The basic attention of the effective planning consists on decisions by the listed companies for corporate tax avoidance which is made by the managers with the consent of the shareholders. In synergy of tax planning, the managers of the listed companies show their interests with the mutual collaborations of the shareholders for increasing the profit of listed companies. Whenever, the activities of tax planning are maintained for synergy intention and then it is beneficial to generate wealth for the shareholders. Agency theory demonstrates that the interest of the managers and shareholders is not mandatory coincide and rests on the assumptions that managers are always make best incentive with utilization of their personal utility and may do so even to the detriment of shareholders.

Managers make exerts to avoid tax because they need to fulfill the private benefits and increase their prestige as well appear more valuable for listed companies with show their abilities for the reduction of taxes. The main concern of the managers is addressed in the agency literature comprises on self-interest and opportunism. Alchian and Demsetz; Jensen and Meckling; Eisenhardt, with the presence of reasonable incentives, the managers are found to the activity for the avoidance of tax and consider it legal. This argument makes reason for increasing the profit of the listed companies as well more incentives for managers also.

Corporate tax avoidance by the listed companies showed the effects that managers are main concern for this activity. Hubris emphasizes the manager's role and their personality traits. In the presence of hubris theory, the planning to avoid the tax is viewed initially with the involvement to create motivation for raising the values of the companies and maximize the profit margin of the shareholders. Kim and Limpaphayom, demonstrates that managers intend to concentrate only shareholders whose opinions are for their favor.

This study proposes that corporate tax avoidance activity pertains of synergy; agency and hubris simultaneously take over which interact to find out the consequences. These prior theories explained how to identify the economic motives that effect on managers for making decisions about avoidance of tax. These theories furnished complete set of information that how corporations make proposed changes in financial statements with the involvement of accounting rules and to forecast the economic effects with the involvement of these changes to provide information to investors and regulatory authorities of Pakistan about tax avoidance and its consequences.

In under-developing countries, the forecasting that potentially contributes that high level of avoidance of tax make consequences of evasive practices in which manager are fully participate to hide the actual information regarding these practices. Such assessment is considering good fit when there must be link between variables portrayed in respective mentioned standard is significant.

### Sample selection and research design

**Sample selection:** The sample of study comprises on financial listed companies of the Pakistan stock exchange. This study includes 279 financial listed companies because these companies have unique accounting standards and regulatory environment. Financial



accounting data is gathered by means of annual reports and data portal of Pakistan stock exchange.

**Measures of tax avoidance:** In accounting literature, there is lacking of measures regarding avoidance of tax. Generally, tax avoidance can be measured from three dimensions and each measure captures isolate prospects of the construct. The first two aspects are based on Book-Tax Differences (BTD).

Current income tax=Income tax expenses+(ending deferred income tax liabilities-beginning deferred income tax liabilities)-(ending deferred income tax assets-beginning deferred income tax assets)

BTD=Profit before tax-minority shareholder interest-(current income tax expenses/tax rate-changes in the amount caused by making up losses for prior periods)

The second way is to measure the tax avoidance is proposed by Desai and Dharmapala. This measure focuses on BTD that cannot be explained by the variations in total accrual. We denote this measure by TS as follows:

$$BTD_{i,t} = \beta_1 TA_{i,t} + \mu_i + \sum_{i,t}$$

$$TS_{i,t} = \mu_i + \sum_{i,t}$$

Where, TA (Total accruals)=Total income-cash flows from operating activities

The second way is to measure the tax avoidance is proposed by Desai and Dharmapala, This measure focuses on BTD. Both measures are widely adopted in this research, such as Chen, et al. Total book-tax gap reflects both permanent and temporary BTD in avoidance of tax; however, it makes no distinction between tax shelter transactions and operating activities. This gap is influenced by corporate earnings management as well to decrease the effect of earning management. Desai and Dharmapala, construct an empirical measure of corporate tax avoidance. The component of the book-tax gap is not attributable to accounting accruals. These two indicators can complement with each other. Recent studies are adopting company's Effective Tax Rates (ETRs) to measure the avoidance of tax. However, Effective Tax Rate (ETR) does not distinguish the difference between government tax preference, tax avoidance and taxation lobbying activities as well. In Pakistan, local government take over several tax preference policies to attract the relevant investments that lead to low rate then statutory rate. Thus, by using of ETR to measure the avoidance of tax could be misleading in Pakistan. Pakistan stock exchange listed companies disclose the actual statutory tax rate in the forms of notes to financial statements. So, it is more convenient to measure the avoidance of tax by means of difference between actual statutory rate and effective tax rate. However, this indicator may be affected by the involvement of different tax rates where it applied to parent company as well subsidiaries especially different consolidation rules exists for book and tax intentions. There is greater difference shows the high degree of tax avoidance. The values of the ETR and actual statutory tax rate are gained from annual reports and financial statements of the listed companies of the Pakistan stock exchange. We denote the difference among ETR and adaptable rate by ETR as follows:

$$ETR = \text{Income tax expense/pre-tax income}$$

In accounting literature, there is lacking of measures regarding avoidance of tax. Generally, tax avoidance can be measured from three dimensions and each measure captures isolate prospects of the construct. The first two aspects are based on Book-Tax Differences (BTD).

This study is observing the tax avoidance by the financial listed companies of the Pakistan stock exchange and its influence on the government as well companies value. Thus, adopt a broad definition of tax avoidance that is supportive for our research objectives.

### Empirical model and variable construction

For the sake of analysis, we raise two questions: Would tax avoidance decrease values of the listed companies with poor corporate governance? If it exists, is it due to high level of agency costs with poor governance of companies? Would information transparency furnish a buffer for declining company values resulted from avoidance of tax? To shed light on these questions, one of the models is specified.

$$q_{i,t} = a_0 + a_1 \text{TaxAgg}_{i,t} + a_2 \text{PPE}_{i,t} + a_3 \text{DEBT}_{i,t} + a_4 \text{ROA}_{i,t} + a_5 \text{SIZE}_{i,t} + a_6 \text{NOL}_{i,t} + a_7 \text{GROWTH}_{i,t} + a_8 \text{BETA}_{i,t} + a_9 \text{YEAR}_{i,t} + \sum_{i,t}$$

Following Zhang, et al. we add a quadratic term of trans in model (3) which is given in "U-shape" relation of information transparency and values of the Pakistan stock exchange listed companies. In this model,  $a_0$  refers to constant interception,  $a_1$ - $a_{12}$  are coefficients.  $\varepsilon$  represent residual error.

**Dependent variables:** Tobinsq (q) is used to represent the values of the companies. Since, there are two main classes of shares in Pakistan stock exchange listed companies, tradable shares and non-tradable shares. Tobins (q) is used by Desai, M.A. and Dharmapala, D. for their empirical work on Shanghai stock exchange. We define Tobins q as follows:

$$q = (\text{Market value of tradable shares} + \text{market value of non-tradable shares} + \text{book value of liabilities}) / \text{total assets}$$

Following Zhang, et al. we use two ratio variables to measure agency costs: Ratio of Sales to Total Assets (STA) and the ratio of period expenses to sales (OETS):

$$STA = \text{Sales} / \text{total assets}$$

$$OETS = (\text{Selling expense} + \text{general administrative expense} + \text{financing expense}) / \text{sales}$$

**Independent variables:** We use three ways to measure the avoidance of tax: BTD, TS and ETR as define above. These measured are an interaction term for tax aggressiveness and transparency to investigate the moderating role of accounting information quality on tax avoidance and value of the listed companies.

**Control variables:** We include company size (SIZE), return on assets (ROA), fixed assets (PPE), capital structure (DEBT), loss carry forwards (NOL), sales growth rate (GROWTH) and (BETA) in the model as control variables because prior studies show that they are relevant to company value. Year dummy is also included to control for year fixed effects. The control variables are defined as:

$$\text{PPE} = (\text{Net PP and E-net investment in real estate}) / \text{beginning total assets.}$$

DEBT=(Short term loans+notes payable+long term

Liabilities)/beginning total assets.

ROA=Total profits/beginning total assets.

SIZE=LN (Total assets).

GROWTH=(Current operating revenue-prior operating revenue)/  
beginning operating revenue.

NOL=Losses carry forwards/beginning total assets.

BETA=Stock market risk, sourced from accounting database.

YEAR=Year dummy variable.

**Estimation method:** This measure focuses on BTD that cannot be explained by the variations in total accrual. We denote this measure by TS as follows: We expect that the level of tax avoidance depends across years. For empirical research, we adjust the standard errors for correlation. We also use regression with to test the standard errors. We use fixed influential model following the Hausman test and most of the corporate finance studies suffer endogeneity issues. Thus, fixed influential model is employed to alleviate the concern of endogeneity.

	CV	BTD	DEBT	ETR	GROWTH	NOL	PPE	RISK	ROA	TS	CS
Mean	64.29104	61.30358	63.88315	64.81183	61.07527	61.29247	64.05341	63.99498	64.00645	62.31577	140.0000
Median	66.00000	63.00000	65.00000	66.00000	63.00000	63.00000	65.00000	65.00000	65.00000	63.00000	140.0000
Maximum	92.00000	96.00000	94.00000	93.00000	88.00000	88.00000	89.00000	89.00000	97.00000	92.00000	279.0000
Minimum	20.00000	20.00000	22.00000	25.00000	21.00000	25.00000	27.00000	12.00000	24.00000	24.00000	1.000000
Std. dev.	9.504876	8.609738	10.50861	10.53070	10.59919	10.66534	9.905524	10.49349	10.32335	10.01921	80.55428
Skewness	-0.98323	-0.767	-0.70721	-0.69523	-0.28619	-0.41372	-0.72338	-0.77397	-0.68101	-0.51397	-4.11E-17
Kurtosis	4.560937	4.429227	3.294473	3.399219	2.543274	2.445380	3.759492	3.910416	3.280664	3.411200	1.799969
Observations	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790	2790

**Table 1.** Descriptive statistics.

The value of the correlation shows in the above Table 2 which indicated the strength of the relationship between two variables. The values of the correlation lie between -1 to +1. If the value of the correlation is 1, its mean there is a strong correlation. If the value of correlation less than 0.03, it means there is weak relationship between variables. If the value is great than 0.7 or near to 1. Its means there is a strong correlation. If the values lies between 0.3 and 0.7. It means there is a medium relationship between variables. The sign shows that there is a positive and negative correlation between variables. According to the above results, all the values are less than 0.7 it means there is a medium or weak correlation between variables. Furthermore, it is also indicated that there is no problem of multi-collinearity found in the data. To present the main variable of the interest. Correlation among avoidance of tax measures is significant at the level of 0.05. BTD is positively correlated between with TS and ETR. It confirms that these measures capture different aspects of tax avoidance construct. q Is negatively and significantly correlated with BTD and TS which indicates avoidance of tax is associated with decreasing the company's value. The correlation between ETR and BTD suggest that companies are more aggressive than their opaque counterparts.

## Results and Discussion

Table 1 shows the descriptive statistics of the variables. This table contained the values mean, median, maximum, minimum, standard deviation, skewness, kurtosis and observations. In this regard, the mean and median values show the central tendencies of the data. The value of the standard deviation shows that how much data is deviated from its mean value/central point. The maximum and minimum values show that data is lying between these two values. It properly shown that changes of tax avoidance activities relevant to time variables. Furthermore, the skewness values show the normality of data. The kurtosis values show the height of bel curves. Putting bird eye view on data, there is no issue or problem find in the data. The mean value 64.29104, median 66.00000, maximum and minimum are 92.00000, 20.00000. The values of the standard deviation are 9.504876 whereas skewness -0.983234, Kurtosis 4.560937.

The companies are negatively associated with the tax avoidance as well significant coefficient. Thus, companies in Pakistan react negatively to avoidance of tax as opposed to China counterparts' positive reactions. It is interesting to dig into this finding. Presumably, high agency costs might give rise to this phenomenon. The relations of tax avoidance and agency costs are also reported. Higher the ratio is low level of agency cost. Tax avoidance metrics are negatively related which indicates there is tax avoidance by the listed companies of the Pakistan stock exchange. Tax aggressive companies generate high agency costs. Thus, tax avoidance is significantly associated with the agency cost. It means that  $H_2$  is supported. It indicates that listed companies have their ownership structure and institutional environment. The conflict of interest exists between controlling shareholders might lead the high agency costs.

Furthermore,  $H_1$  is also supported because tax avoidance behavior is negatively associated with the values of the companies which influence on their performance also. Tax avoidance measures are significant with the values of the companies as empirical discussion by Desai, M.A. and Dharmapala, D. on Shanghai stock exchange.

	CV	BTB	CS	DEBT	ETR	GROWTH	NOL	PPE	RISK	ROA	TS
CV	1	.	.	.	.	.	.	.	.	.	.
BTB	0.46	1	.	.	.	.	.	.	.	.	.
CS	0.17	0.11	1	.	.	.	.	.	.	.	.
DEBT	0.29	0.25	0.13	1	.	.	.	.	.	.	.
ETR	0.25	0.24	0.14	0.16	1	.	.	.	.	.	.
GROWTH	0.48	0.37	0.2	0.26	0.18	1	.	.	.	.	.
NOL	0.29	0.21	0.12	0.19	0.11	0.41	1	.	.	.	.
PPE	0.37	0.33	0.08	0.24	0.19	0.27	0.19	1	.	.	.
RISK	0.52	0.47	0.13	0.27	0.2	0.53	0.29	0.34	1	.	.
ROA	0.29	0.26	0.07	0.16	0.14	0.19	0.14	0.18	0.25	1	.
TS	0.27	0.29	0.13	0.14	0.2	0.25	0.13	0.16	0.24	0.13	1

**Table 2.** Correlation.

Table 3 present the consequences of Panel unit root. Levin, Lin and Chu and Im, Pesaran and Shin W-stat applied. According to the

values that all the selected variables are stationary at level. There is no time trend exist in data.

Series	Levin, Lin and Chu t				Im, Pesaran and Shin W-stat				Result
	Level		1 <sup>st</sup> diff		Level		1 <sup>st</sup> diff		
	T. stat	P value	T. stat	P value	T. stat	P value	T. stat	P value	
CV	-41.18	0			-21.62	0			I(0)
ROA	-35.68	0			-19.68	0			I(0)
PPE	-40.15	0			-19.89	0			I(0)
DEBT	-41.07	0			-20.57	0			I(0)
NOL	-37.88	0			-19.38	0			I(0)
GROWTH	-37.95	0			-19.96	0			I(0)
RISK	-38.65	0			-20.08	0			I(0)
TS	-37.37	0			-19.2	0			I(0)
BTB	-34.09	0			-18.14	0			I(0)
ETR	-38.55	0			-18.79	0			I(0)

**Table 3.** Unit root test.

According to the below Table 4 full modified v square, dynamic ordinary square and canonical integration is test which is presented. According to the FM OLS, all are significant at 1 percent level of significance except CS and NOL. The sign of the coefficient shows that there is positive and significant relationship between independent and dependent variable. Furthermore, the consequences of dynamic least squares indicated that all the variables are significant at level except CS, No I and TS. These results are similar to Tang and Firth, suggesting that tax law is more conservative on expense recognition than accounting principles in China. The positive interaction sign indicates that information disclosure

transparency combining with tax avoidance practice which increase the company value whereas company value would be decreased if avoidance of tax is implemented in opaque companies. Additionally, canonical configuration regression also shows in the above table which indicates that all variables are significant at 1 percent except CS and NOL. According to the results it is concluded that there is long term relationship exists between dependent and independent variables. The value of the R2 is not less than 0.45, it means the total variation in dependent variable is because of independent variable.

Dependent variable: CV					Dependent variable: CV					Dependent variable: CV				
Method: Fully Modified Least Squares (FMOLS)					Method: Dynamic Least Squares (DOLS)					Method: Canonical Cointegrating Regression (CCR)				
Variable	Coefficient	Std. error	t-Statistic	Prob.	Variable	Coefficient	Std. error	t-Statistic	Prob.	Variable	Coefficient	Std. error	t-Statistic	Prob.
CS	0.002	0.002	1.18	0.238	CS	0	0.002	0.105	0.917	CS	0.002	0.002	1.175	0.24
BTD	0.101	0.019	5.242	0	BTD	0.118	0.038	3.145	0.002	BTD	0.097	0.026	3.681	0
DEBT	0.068	0.016	4.379	0	DEBT	0.115	0.029	3.968	0	DEBT	0.066	0.021	3.172	0.002
ETR	0.076	0.016	4.711	0	ETR	0.086	0.028	3.074	0.002	ETR	0.074	0.02	3.589	0
GROWTH	0.116	0.017	6.675	0	GROWTH	0.158	0.033	4.788	0	GROWTH	0.116	0.024	4.907	0
NOL	0.027	0.017	1.602	0.109	NOL	0.018	0.034	0.537	0.592	NOL	0.019	0.023	0.796	0.426
PPE	0.143	0.016	8.762	0	PPE	0.124	0.03	4.157	0	PPE	0.147	0.022	6.762	0
RISK	0.168	0.017	10.127	0	RISK	0.175	0.033	5.329	0	RISK	0.175	0.022	7.794	0
ROA	0.126	0.015	8.299	0	ROA	0.149	0.029	5.127	0	ROA	0.121	0.021	5.864	0
TS	0.072	0.017	4.179	0	TS	0.036	0.031	1.157	0.247	TS	0.078	0.023	3.396	0.001
C	7.347	1.206	6.091	0	C	2.162	2.031	1.064	0.287	C	7.552	1.473	5.128	0
R-squared	0.45	Mean dependent var		64.3	R-squared	0.47	Mean dependent var		64.3	R-squared	0.45	Mean dependent var		64.3
Adjusted R-squared	0.45	S.D. dependent var		9.5	Adjusted R-squared	0.46	S.D. dependent var		9.49	Adjusted R-squared	0.45	S.D. dependent var		9.5
S.E. of regression	7.03	Sum squared resid		137147.2	S.E. of regression	6.94	Sum squared resid		132431.1	S.E. of regression	7.03	Sum squared resid		137282.8
Long-run variance	47.68				Long-run variance	49.25				Long-run variance	47.68			

**Table 4.** Regression.

Hausman test Table 5 Hausman test indicates that model has fixed effect. Null hypothesis reject and accept the fixed model. 0.00143

reject null hypothesis.

#### Correlated random effects-Hausman test

Equation: Untitled

Test cross-section random effects

Test summary	Chi-Sq. statistic	Chi-Sq. d.f.	Prob.
Cross-section random	20.64208	9	0.0143

**Table 5.** Hausman test.

## Conclusion

This paper investigates whether tax avoidance behavior increases company's value in Pakistan institutional setting. While the traditional view of corporate tax avoidance suggests that shareholder value should benefit from tax avoidance activities, an agency perspective on corporate tax avoidance furnishes a more comprehensive prediction. Specially, corporate governance should a crucial part of the valuation of the purported corporate tax savings. In such a way, avoidance of tax should increase the after-tax company's value that effect is potentially offset, particularly in poorly governed companies, by enhancing probabilities with the passage of time. Pakistan is a country where there are unique institutional arrangements for making corporate agency problems, more severe than other western countries. This study found the consequences that there is an

increase trend for the avoidance of tax which tends to reduce the level of the company's value. Tax avoidance behavior does more horrible than good to investors in Pakistan. After the development of Pakistan stock exchange, listed companies have made high level of exerts for improving corporate governance which including enhancing information disclosure transparency. In this empirical research, we also found that corporate transparency interacts with tax avoidance and acts as the main role for corporate value. The negative relationship exists between company value and tax avoidance which is attenuated in well governed companies. The investors are not furnishing the place for value premium on tax avoidance because it is an activity which could camouflage manager rent-seeking behavior. In such condition, investors in Pakistan are downplaying for the significance of tax avoidance, although information transparency could soften their negative aspect of tone. One of the main limitations of this study is that we focus to examine the general economic consequences for avoidance of tax in



institutional context. The policy implications of this study presents that the characteristics of the taxation system in Pakistan, such as the structure of rates as well status of enforcement, will shape managerial actions as well as the severity of agency problems. Avoidance of tax does not represent wealth transfer from government to shareholders but it means part of gains might be piped into self-serving managers. Hence, improving corporate governance and strengthening tax enforcement can bring a more tax revenue and shareholder wealth.

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