TAX PLANNING, FIRM VALUE, AND MODERATING ROLE OF CORPORATE GOVERNANCE

Researcher:
Mr. Waqar Ali Khan
306-FMS/MSFIN/F14

Supervisor:
Dr. Mazhar Hussain Ch.
Assistant Professor

Faculty of Management Sciences
INTERNATIONAL ISLAMIC UNIVERSITY,
ISLAMABAD

1 - Theses
2 - Corporate plan
3 - Tax planning

TAX PLANNING, FIRM VALUE, AND MODERATING ROLE OF CORPORATE GOVERNANCE

Mr. Waqar Ali Khan
306-FMS/MSFIN/F14

A thesis submitted in partial fulfillment of the requirements for the Degree of Master of Philosophy/Science in Management with specialization in Finance at
the Faculty of Management Sciences
International Islamic University,
Islamabad

Supervisor
Dr. Mazhar Hussain Ch.

March, 2018

In the Name of Allah, the Most Merciful and Beneficent

DEDICATION

To my Mother, Father and Sister.

(Acceptance by the Viva Voce Committee)

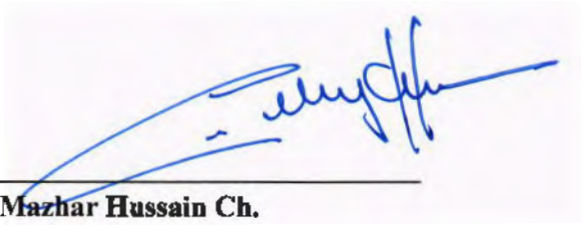
Title of Thesis: "Tax Planning, Firm Value, and Moderating Role of Corporate Governance".

Name of Student: Mr. Waqar Ali Khan

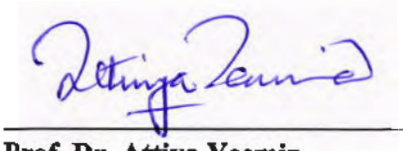
Registration No: 306-FMS/MSFIN/F14

Accepted by the Faculty of Management Sciences INTERNATIONAL ISLAMIC UNIVERSITY ISLAMABAD, in partial fulfillment of the requirements for the Master of Science/Philosophy Degree in Management Sciences with specialization in Finance.

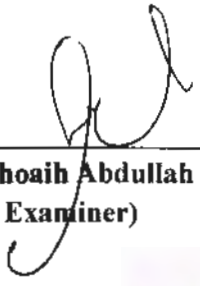
Viva Voce Committee



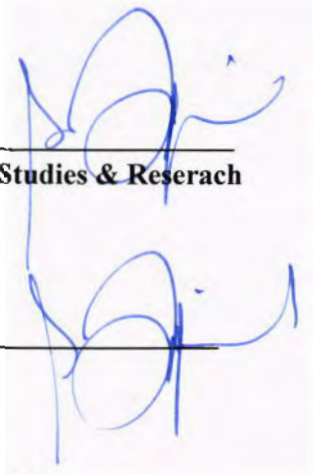
Dr. Mazhar Hussain Ch.
(Supervisor)



Prof. Dr. Attiya Yasmin
(External Examiner)



Mr. M. Shoaib Abdullah
(Internal Examiner)



Chairman Higher Studies & Reserach

Dean, FMS

Date: 26th April, 2018

COPYRIGHTS

DECLARATION

I hereby declare that this thesis, neither as a whole nor as a part thereof, has been copied out from any source. It is further declared that I have prepared this thesis entirely on the basis of my personal effort made under the sincere guidance of my supervisor and colleagues. No portion of work, presented in this thesis has been submitted in support of any application for any degree or qualification of this or any other university or institute of learning.

Waqar Ali Khan
306-FMS/MSFIN/F-14

ACKNOWLEDGEMENT

All praise to Allah Almighty, a source of wisdom and knowledge endowed to mankind and to the Holy Prophet (Peace Be Upon Him) who guides us towards that knowledge. I thank to Allah for helping me in every aspect of life including my MS studies and research. I am indebted to my supervisor Dr. Mazhar Hussain Ch. for his valuable knowledge, time and directions for carrying out my research work and it was an honor for me to be his student. I would also like to appreciate my fellow class mates, for their consistent encouragement. To my family for their steady support and understanding and moral support. Finally, I would like to show my gratitude to those who have not been mentioned here but who have support me in any way during the completion of this thesis.

FORWARDING SHEET

The thesis entitled "Tax Planning, Firm Value, and Moderating Role of Corporate Governance" submitted by Mr. Waqar Ali Khan (306-FMS/MSFIN/F-14) as partial fulfillment of MS degree in Management Sciences with specialization in Finance, has completed under my guidance and supervision. The changes advised by the external and the internal examiners hava also been incorporated. I am satisfied with the quality of student's research work and allow her to submit this thesis for further process as per IIUI rules & regulations.

Date: _____ Signature: _____

Name : Dr. Mazhar Hussain Ch.

ABSTRACT

Tax planning has been around since the existence of statutory taxes. Individuals and businesses alike have been evading taxes through different type of tax planning activities. In firm's tax planning is carried with the view that any amount of tax saved results in net increase in firm's value. However, stakeholder-agency perspective suggests that tax planning is a complex phenomenon and that it may not necessarily result in direct increase in firm's value. In fact, as per tax planning results increase in tax risk and overall firm risk, it creates agency problems like rent extraction by the management of the firm and it could also be source loss of goodwill, social-political costs, public outcry and legal penalties. Shareholder or market may, therefore, penalize the firm engaged in tax planning by discounting its share price. Further, good corporate governance mechanism established in firm may offset the negative market opinion regarding firm involvement in tax planning. Strong corporate governance ensures that the tax planning activities are carried out after considering the interests of all the stakeholders involved and that whatever tax planning activities carried out by management are for the benefit for owners. The governance mechanism monitors and controls management and prevent any sort of diversionary activities from management. This study focuses on the relationship of tax planning and firm value and moderating role of corporate governance on their relation. The nature of data used in the study is panel and fixed effect model has been used for the estimation impact of tax planning and firm value and the controlling role of corporate governance. The results of the study suggest a positive relation between tax planning and firm value. These results are in accordance to the traditional perspective of tax planning that believes that tax planning is a value enhancing activity. Further, results also indicate that firm's corporate governance does not play any significant role in controlling the relationship between tax planning and firm value.

TABLE OF CONTENTS

CHAPTER 1

1. INTRODUCTION:

1.1. BACKGROUND

Since the dawn of civilization statutory taxes are levied by societies or states on its members in order to provide social goods or services to the community. These members may include individuals, group of individuals, and businesses. Statutory taxes represent a major outflow of financial resources from these societal members to the state or government. Thus, in order to minimize this financial out flow or their tax liabilities individuals and businesses, alike, indulge in tax management or tax planning activities. In fact, tax is the most important factor that businesses consider in their financial and investment decision making process. For example, it is common knowledge that debt is a cheaper source of financing as it results in tax saving. Thus, often times businesses prefer debt financing to equity financing because of its tax saving feature; and in this way they also manage to reduce tax liabilities. Similarly, sometimes governments announce tax free zones or rebates on investments in some specific industry or geographical area to augment economic growth. Businesses look for these sort of investment opportunities as they provide the benefit of reduced taxation. Likewise, business firms also indulge in tax planning activities, such as underreporting, underpricing and corporate inversion or restructuring, in order to reduce their tax liabilities. These activities may be legal or illegal depending upon what sort of tax management tool the business is using and on the local tax laws.

While defining tax planning, in his report to European Parliament, Murphy R. (2012) quoted the words of British judge Lord Templeman. According to Lord Templeman "a tax avoidance scheme includes one or more interlinked steps which have no commercial purpose except for the avoidance

of tax otherwise payable and can conveniently be described as artificial steps. A tax avoidance scheme does not leave the taxpayer any better or worse off but leaves the (State) Revenue worse off". Similarly Bruce, Deskins, and Fox, (2007) have defined tax avoidance as "a broad set of schemes that only affects the financial arrangements of firms for the purpose of tax evasion". Slemrod, (2004), on the other hand, defines tax planning as "anything that corporations do to reduce their tax liability". Wahab and Holland (2012) on the otherhand described tax planning as "all the activities of a firm designed to reduce tax liabilities".

Tax planning activities are divided into two major subcategories based upon the legality of these activities i.e. tax avoidance and tax evasion. Kirchler & Kirchler (2003) defines tax avoidance as firm's attempt to reduce its tax liabilities by exploiting loopholes in the system, while, according to them, tax evasion means attempts of firm to illegally reduce its tax liabilities. As the difference between the two types of tax management activities is of legal nature, and outside the scope of this investigation, thus it will be ignored in this study and both kind of activities i.e. tax avoidance and evasion, will be treated as same. Further, as tax evasive activities are mostly illegal, therefore, it is most unlikely to find any record regarding them in the public information published by the firms, which is the main source of data accumulation for this investigation.

The problem of tax compliance is not new, in fact, Andreoni, Erard, and Feinstein (1998) observed that the "tax non-compliance is as old as the taxes themselves". Individuals and business entities have tried to reduce their tax burden since the inception of the concept of statutory taxes. The history of taxation is filled with the examples of tax avoidance activities. In ancient Rome, wealthy individuals and households used to hide or bury their jewelry and gold holdings to avoid taxes. Similarly, instances of the practice of off the book transactions for the purpose of tax evasion, can also be found in as far as old ages. In today's world, too, tax planning or tax management is a

significant aspect for individual, small business and corporate level. In fact, "tax evasion is even more prevalent among corporate taxpayers as their incentive for evasion is higher given the magnitude of their income taxes" (Annuar, Salihu, and Obid, 2014). Lanis and Richardson (2011) recently argued that, managerial decisions whose sole purpose is to reduce corporate tax liabilities through aggressive tax planning schemes have become a widespread phenomenon of the corporate world throughout the globe. The fact that taxes are a direct dent to firm's operational earnings and take away a major chunk of cash that could be distributed among the shareholders or reinvested could be the reason why corporations indulge in tax planning (Annuar et al., 2014). Dharmapala and Desai (2006) observed that "tax shelters are so commonly used that currently they considered by some of the observers as the most serious compliance issue threatening the tax system of US".

However, it is extremely difficult to accurately measure tax avoidance carried out. The main hurdle in the measurement of tax planning is that it is very complex phenomenon and it requires high level of secrecy regarding financial matters to ensure that tax authorities could not find pure tax related transactions. Thus, it is not possible to exactly estimate how much tax is evaded. One of the method used by the Revenue Collecting State Agencies throughout the world is Tax Gap, which literally means the difference between amount of estimated tax liability and the actual amount of taxes collected for the given year (Plumley, 2012). This way the countries try to establish that how much tax owed is not paid. According to the IRS (United States) estimates the total tax gap, including individuals and businesses, due to underreporting was 14.1% and 13.4% of the estimated tax liability in 2006 and 2001 respectively (Plumley, 2012). Similarly, according to Her Majesty Revenue and Customs (HMRC-UK) the total tax gap with respect to corporate income tax was 9.6% and 8.8% of the estimated tax liability in 2010 and 2011 respectively. The same was 6.7% in the financial year of 2013-14 (HMRC, 2014). Similarly, total amount of Swedish tax gap for

the year 2008 was approximately 46 billion SEK, of which approximately 20 billion SEK related to non-payment of income tax by business firms. Of this 20 billion SEK 11 billion SEK was described as tax avoidance by large business organization that constitutes to about 23% of total tax gap of Sweden (Murphy R., 2012). On the other hand, Pakistan is a developing country where enforcement is lenient and tax laws are not strongly enforceable due structural or infrastructure inadequacies. According to an international report, sponsored by World Bank and with the coordination of FBR Pakistan, the federal tax gap of Pakistan for the year 2007-08 was 79% of the actual tax receipts which amounts to approximately Rs.796 billion (Ahmed and Rider, 2008).

Though tax planning is carried out widely throughout the globe, however, there is scarcity of research in this field. The main reasons for dearth literature in this area are that it is highly complicated phenomena and that firms under take special measure to hide their tax avoidance activities from outsiders including shareholders and state agencies. Even the tax returns filled by firms with the government are confidential and researchers don't have access to that information. Whatever research has been conducted so far it has focused on the effect of tax planning on firm's value using the bottom line indicators, assuming that any amount of tax planning carried out is net increase in firm's value and in respect of various determinants of tax avoidance. However, the extant literature have ignored the that firm's tax planning is a complex phenomenon that affect various stakeholders of the firm. Desai and Dharmapala, (2007) believe that tax planning results in various costs, stakeholder and agency problems and that tax savings does not necessarily results increase in the value of firm, in fact tax planning may result in serious increase in firm risks and agency costs (Guenther, Matsunaga, and Williams, 2017; Drake, Lusch, and Stekelberg, 2017; Desai and Dharmapala, 2009; Hanlon and Slemrod, 2009). Therefore, the analysis of tax planning is embedded in stakeholder and agency framework. There is a dearth of published literature on tax

planning and its impact of the value of firm under the assumptions of stakeholder and agency framework.

1.2. THEORETICAL FRAMEWORK:

This study is based upon stakeholder theory, agency theory, legitimacy theory and signaling theory. As the study investigates the valuation of tax planning activities undertaken by the management by the investors or market therefore it could be best explained by stakeholder theory. On the other hand, the opacity created by tax aggressiveness may result in agency issues hence it could be best explained under the agency theory framework. Further the tax planning decisions though are made by managers but they effect also affect government, and society at large, thus it is also sensible to examine these decisions under the teachings of legitimacy theory. Finally signaling theory explains the reaction of market or investors in respect to the involvement of management in tax aggressiveness activities which ultimately affects valuation of firm.

1.2.1. STAKEHOLDER THEORY:

Stakeholder theory argues that those corporations that actively look after their stakeholders will create more value and function more efficiently than the corporations that do not look after the interest of their stakeholders (Kessler et al., 2013). Stakeholder theory views corporation as network of relationship between itself and its divergent group of stakeholders with disparate interests (Zech, 2013). It argues that corporations are not self-sufficient rather they depend on various types of actors that are present in its internal and external environment (Phillips, 2003). These actors or stakeholders are "groups or individuals who benefit from or are harmed by and whose rights are violated or respected by the corporate actions" (Freeman and Evan, 1979). Augier

and Teece, (2017) describe stakeholders as "groups or individuals that have a stake in the corporation's activities". These stakeholders are two main types; primary stakeholders i.e. suppliers, customers, investors, financiers, and local community, and secondary stakeholders i.e. competitors, media, special interest groups and government.

The concept of stakeholder theory or stakeholder management was first presented by Freeman, (1984) in his book named "Strategic Management: A Stakeholder Approach". His work provided the basis for further development of stakeholder framework. His later work elaborated that the stakeholder framework builds upon two basic principles i.e. Principle of stakeholder enabling and principle of management responsibility. The former advocates that "the corporations should be managed for the benefit of the its stakeholders and the later emphasizes that management of the corporation shall have a duty of care to use reasonable judgement to define and direct the affairs of the corporation in accordance with stakeholder-enabling principle" (Friedman and Miles, 2006). Augier and Teece, (2017) posit in order ensure wealth maximization and protection of long run interest of shareholders the management must strive to align the interests of firm and its stakeholders. Parmar et al., (2010) claims that corporations have become increasingly dependent upon their various stakeholder and they are no longer self-sustained fully capable units. These corporations can longer depend upon their competitive advantage by clinging to tis strengths and exploiting available opportunities rather it has become dependent upon garnering the relations that it builds with various players in its environment (Zech, 2013). Phillips, (2003) believes that corporations are dependent upon these constituency groups for their success and these interest groups can influence firm's decisions if they found it in divergence to their interest (Kessler et al., 2013). Friedman and Miles (2002) have further illuminated the importance of stakeholder

framework by arguing that stakeholder may bring action against the corporation or management for failure to perform the required duty of care of protected their interests.

As the shareholders are the ultimate owners of corporate profits, therefore, they are the main beneficiaries of tax savings generated through tax planning activities. However, interests of other stakeholders of the corporation may also be affected by its involvement in tax avoidance (Payne and Raiborn, 2018). Waddock, Bodwell, and Graves, (2002) posit that other stakeholders that might be effected by corporation's involvement in tax aggressiveness are investors, creditors and society at large. Payne and Raiborn (2018) argue that all stakeholders should be considered in the issue of aggressive tax avoidance otherwise the corporations may face repercussions of its actions. Particularly investors may view tax aggressiveness as in conflict to their interests and they may asses it negatively in their valuation of firm (Guenther, Matsunaga, and Williams, 2017; Drake et al., 2017; Desai and Dharmapala, 2009; Hanlon and Slemrod, 2009; Wahab and Holland, 2012; Marriage, 2014a; Marriage, 2014b; Koester, 2011) and accordingly may discount its stock price (Lietz, 2013).

1.2.2. AGENCY THEORY:

Agency theory identifies the modern form of business firm, where ownership and control are separate, as a nexus of contracts between different stakeholders (Fama and Jensen, 1983). It focuses upon the manager-shareholders relationship where the former act as an agent in the interest of the later, the principal (Fama, 1980). According to Hill and Jones, (1992) the "corner stone of the agency theory is that the interest of principal/agent diverge". They argued that, according to the agency theory, principal spend resources and incur costs to establish monitoring devices in order to limit agent's divergence. In addition to this, principal also offers attractive incentive to

the agent to align his interest with that of principal. Furthermore, principal may also incur some bounding costs to prohibit agent from certain actions that might prove harmful for principal's interest. Still, after all these devices, it is expected that divergence between the action of agents and the principal's interests may remain (Hill and Jones, 1992).

The analysis of tax planning decisions is embedded in agency framework (Desai and Dharmapala, 2009). At first glance, it may seem that tax planning results in net saving for the firm, however, that is not the case. In fact, tax planning activities creates agency problems. The complicated procedures adopted for the purpose of tax management in order to hide it from the tax authorities results in financial opacity (Desai & Dharmapala, 2007). Therefore, agency theory suggests that management, especially if goes unchecked, in such an opaque financial environment, may start working in its own interest instead of shareholders. The financial opacity that hides management's tax planning activities from outside scrutiny and the complexity of the transactions involved in tax avoidance lends management the ability to indulge in rent extraction without being noticed or caught (Blaylock, 2016). Shareholders or outsiders have no knowledge of the nature and extent of the transactions involved in tax management, making it easy for management to indulge in diversionary activities, especially in the absence of proper governance mechanism (Desai and Dharmapala, 2009).

1.2.3. LEGITIMACY THEORY:

Similarly, recently researchers have also started analyzing tax planning activities of management in the light of legitimacy theory. According to Schiopoiu Burlea and Popa, (2013) legitimacy

explains the behavior and voluntary activities of organizations in order to fulfill their social contract that provides social recognition to their objectives, license to operate in the said society and survival in its social environment. According to the legitimacy theory if organizational activities do not respect social and moral values of the society, the society impose severe direct or implied sanctions on the organization, that leads to business loss or even result in cessation of organization. The organization has to justify its existence through legitimate social and economic actions that do not hamper the existence of society or any of its stakeholder/component. Therefore, keeping in view its importance Schiopoiu Burlea and Popa, (2013), believe that organizational legitimacy becomes an objective for organization because organization's failure to earn organizational legitimacy results in its failure. Lindblom, (1994) defined organizational legitimacy as "a status, which exists when an entity's value system is congruent with the value system of the larger social system of which an entity is a part. When a disparity, actual or potential exists between the two value systems there is a threat to the entity's legitimacy". According to legitimacy theory, there exist an implied social contract between business organizations and society. The terms of this implicit social contract are based upon the expectations of the various stakeholders comprising the society (Lanis and Richardson, 2011). One of the term included in this implied social contract is that firms should pay their legitimate share of taxes so that state can carry out its functions in effective manner and provide for its constituents. Tax planning, however, results in diversion of funds from state to firms which results in fall in state revenue. This decrease in state revenues diminishes the state's capacity to deliver public goods and perform various functions (Lanis and Richardson, 2013). Tax aggressiveness, therefore, is a strategy that is conflicting with the expectations of various society stakeholder of firms and results in breach of the implied social contract between corporations and the society as it dents the ability of state to provide public goods

and ultimately effecting overall society. Corporate tax aggressiveness is, therefore, considered by society or its constituent members as a socially irresponsible and unlawful activity and generates a hostile behavior in society and its various constituents towards the tax aggressive firm (Lanis and Richardson, 2011). Accordingly, aggressive tax planning poses serious risks for the firm and can cause serious threats to the firm's market value in fact "the organizational legitimacy of the firm is being questioned by the general public" and the very existence of the firm may be threatened (Schiopoiu Burlea and Popa, 2013).

1.2.4. SIGNALING THEORY:

On other hand, like any other financial decision of firm, the impact of tax planning is explained by signaling theory. Signaling theory was put forth by the economic scholars to explain the nature and workings of asymmetric informed market. Like any other financial decision of firm, the impact of tax planning can be explained by signaling theory. The concept of signaling was first introduced by Spence, (1973), in labor market. According to his work, in order to restore the information equilibrium in otherwise asymmetrically informed job market, high value candidates convey signals such as higher education etc. to the potential employers in order to distinguish themselves from low value candidates. Since then this concept has been adapted by financial theorists to explain the asymmetric nature of financial markets. The signaling theory assumes that insiders i.e. management are better informed about the future performance of the firm and that the financial decisions that they make signal their expectations about the future of the firm.

Several studies have been conducted explaining the signaling effect of management's decision. Researchers have found that firm's financial decisions such as dividend policy, issuance of debt, seasonal equity issue and stock purchase etc. act as signals and that market responds to these

decisions (Levy and Lazarovich-Porat, 1995; Ross, 1977; Asquith and Mullins Jr, 1986; (Downes and Heinkel, 1982). Tax management, like dividend policy, capital structure, seasoned debt and equity issue, is also an important financial decision and involvement of firm in tax management can acts as a power full signal that the investors cannot ignore in their analysis. In theory, news about involvement of firm in tax management can either increase or decrease stock price as the market reaction is solely dependent upon how the majority of market perceives its involvement in tax aggressive activities.

1.2.5. THEORETICAL FRAMEWORK:

The seminal Scholes-Wolfson-paradigm (Scholes & Wolfson, 1992) of tax planning suggests that tax planning is a multifaceted phenomenon and that it should be carried out considering three important principles i.e. all parties, all taxes and all costs. The first principle of the Scholes-Wolfson-paradigm (Scholes & Wolfson, 1992) i.e. all parties is in congruence with stakeholder theory. The cannon of "all parties" suggests that interests of all stakeholder of the firm must be taken into account during tax planning in order to achieve its goal of profit and wealth maximization (Scholes and Wolfson, 1992). Market participants or investors are an important stakeholder that are progressively becoming reactive towards the risk associated with tax planning. As per the market participants tax planning may be beneficial in the short run however it may lead to long run financial risks (Marriage, 2014a). Tax planning like any other financial decisions acts a signal for the market and as the market participants gain information regarding firm's tax aggressive activities they may react and re-evaluate the market value of firm (Koester, 2011).

Tax planning can influence investment decision (Marriage, 2014a), and the perception of investors regarding the value of a tax aggressive firm, is affected in both direct and indirect manner (Lietz,

2013). Guenther, Matsunaga, and Williams, (2017) agree to the notion that volatility in effective tax rates due to tax aggressive policies is associated with volatility in stock value. It is also believed that investor's valuation of tax planning activities depends upon the associated level of tax risk (Drake et al., 2017). Tax avoidance results in higher level of uncertainty with respect to future tax payments of the firm and the involvement of a firm in tax planning increases its tax risk (Blouin, 2014; Guenther, Matsunaga, and Williams, 2017; Drake et al., 2017). On the other hand, Guenther, Matsunaga, and Williams (2017) also posit that increase in tax risk of a firm is associated with increase in its overall firm risk. They further argued that tax avoidance is a risky activity in which managers especially risk averse will minimize their investments. As per Badertscher, Katz, and Rego, (2013) tax planning may result in significant costs on firms and their managers in the form of fees paid experts, time spent on the resolving the issues related to tax audits, reputational loss and financial penalties paid to the tax authorities due to legal ramifications of tax aggressiveness. Therefore, involvement of a firm in tax aggressive activities may signal to the market participants that risk of the firm has increased and market participant may discount its stock value for assuming extra risk posed due to tax planning activities.

On the other hand, Desai and Dharmapala, (2009) argue that tax avoidance or tax planning may result in agency costs. tax planning involves complexity and secrecy in order to avoid outside detection. This secrecy creates financial opacity which may lend the management the opportunity to involve in rent extraction and divert corporate wealth for private benefit (Dharmapala and Desai, 2006). Accordingly, as market participants gain the information of firm's involvement in tax planning activities they may suspect involvement of its management, especially in the absence of a strong corporate governance system established in the firm, in opportunistic activities at the expense of the real owners and may, therefore, discount its stock price. Investors may also attribute

more relevance to the potentially negative consequences of tax planning in the form of socio-political costs, business loss, public outcry and heavy fines, in case of being caught. Consequently, investor may include these potential consequences in their analysis of stock price of a tax aggressive firm and may, therefore, discount it accordingly (Lietz, 2013). Moreover, aggressive tax avoidance is likely to create opacity, blurring the information provided by the management of the firm to the outside stakeholder. Market participant will assume the financial information conveyed to them by the management as unreliable and this may impact their valuation of tax planning activities in a negative manner (Dharmapala and Desai, 2006). Goh, Lee, Lim, and Shevlin, (2013) suggest a significant negative relation between general tax avoidance and firm value. They argue that the quality of information provided by the tax aggressive firms is poor which ultimately is negatively associated firm value, as per the model proposed by Lambert, Leuz, and Verrecchia, (2007) for market reaction to quality of information conveyed by the firms.

Finally, presence of a good corporate governance mechanism also acts a strong signal for the investors. Market participants may not penalize tax aggressive firms with good corporate governance for their aggressive tax avoidance activities (Wahab and Holland, 2012; Annuar et al., 2014; Desai and Dharmapala, 2009; Desai and Dharmapala, 2007; Wilson, 2009; Hanlon and Slemrod, 2009; Lestari and Wardhani, 2015). In fact, whatever measures taken by management to reduce tax liabilities is considered purely in the shareholders' interest as there exist a strong control mechanism in the form of corporate governance that ensures that management's tax planning decisions are purely and solely for the benefit of the shareholders. The strong corporate governance mechanism will monitor managements activities related to tax planning and ensure that any amount of tax saved is for the benefit of shareholders. A strong board ensures that any sort of plan

for reduction tax liability carried out by the management is a well thought out one after careful deliberation and in accordance with the interest of all stakeholders.

1.3. RESEARCH GAP:

The basic premise for analyzing tax planning through the lens of stakeholder theory framework is that tax planning does not necessarily means direct increase in firm value. Tax planning leads to increase in tax risk and overall firm risk which effects the perception of market participants about the value of firm. Tax planning requires manipulation on the part of manager in the accounting record of company which brings in additional risk for manager and the firm. Further it results in financial opacity which in turn provides opportunity for the managerial opportunism. Also, tax planning may result in loss of transparency and reliability of information and its quality with respect of usefulness for the market which may result in value implications for the firm.

Only a handful of studies have been conducted analyzing tax planning with reference to different variables keeping in mind the valuation for tax planning by the market participants, so far. However, these studies have been published with respect of developed market of US and UK only. While these studies may be generalizable to their own market settings, however, their results may not be representative for the market of developing economies because the basic structure of these markets are different than that of the developed markets. Contextual perspective (Pettigrew, 1990) clearly states that political, social, institutional and historical context influences the functioning of corporate settings. Further, the information quality of accounting data and their value implications are country specific (Ali and Hwang, 2000 ; Alford, Jones, Leftwich, and Zmijewski, 2013). Therefore, to better understand the nature of relationship of tax planning and its valuation by the

market in a developing economy it is only appropriate to conduct such a study in said economy. There is a scarcity of published research in this field in respect of Pakistan.

Moreover, Dharmapala and Desai (2006) explained the importance of corporate governance in monitoring the management to make sure that the tax management activities are carried out only in the interest of shareholders. They have discussed the potential moderating role of corporate governance in a corporate environment for the tax savings to be fruitful for shareholders. Similarly Annuar, Salihu, and Obid (2014) recently in their review of tax literature emphasized the potential interactive role of corporate governance while handling the tax planning decisions in corporate environment. Lestari and Wardhani (2015) have also recommended in the future research direction of their work to investigate different aspects of corporate governance with respect to tax avoidance and its role as a moderator for the relationship between tax planning and firm value. To the best of author's knowledge, no such investigation has been conducted in Pakistan, accordingly this study is conducted to investigate the role of corporate governance on the relationship between tax planning and firm value, keeping in view local governance structure.

1.4. PROBLEM STATEMENT

According to the tax related literature, companies indulge in tax evasive activities. These activities may be legal or illegal in the eye of tax collecting statutory bodies. The academia throughout the world is divided in its opinion regarding the viability of the tax management activities carried out by the management of the firms for the firm owners. There are both for and against arguments in the theoretical literature regarding the tax planning of firms. Similarly, empirical evidence also shows mixed results with studies both confirming positive and negative effect of tax planning on

the owner's wealth. Therefore, the first problem that this investigation is going to address is "exploring the relationship between tax planning and firm value."

In addition, as the recent theoretical advancements in this area advocates the potential of corporate governance in monitoring the management regarding their tax planning decisions. Thus, the second problem addressed in this investigation is "analyzing the potential moderating effect of corporate governance on the relation between firm value and tax planning".

1.5. RESEARCH OBJECTIVES

The two basic objectives of this study are:

- To examine whether there exists a relation between tax planning and firm value of the listed companies in Pakistan, and;
- To investigate the potential moderating effect of the corporate governance on the possible relation between tax planning and firm value.

1.6. RESEARCH QUESTIONS

Both the traditional and agency framework for tax planning have competing views regarding the shareholder's valuation of tax planning activities. Further, the empirical research in this area also furnishes mixed results. Thus, the first research question for this investigation is;

i. What is the impact of tax planning on firm value?

Further, in the light of above discussion regarding the potential interactive role of corporate governance the second research question is;

ii. What is the impact of corporate governance on the relationship between tax planning and firm value?

1.7. SIGNIFICANCE OF THE RESEARCH:

Desai and Dharmapala (2006), in their investigation showed that, there is a significant relationship between tax aggressiveness and firm value. Similarly, Wahab and Holland (2012) also confirms a significant relation between tax management activities of firm and its market value. Furthermore, Desai and Dharmampala (2007), Wahab and Holland (2012), and Annuar et al., (2014) suggested that corporate governance can influence the relation between tax planning and firm value.

The findings of this study will provide insights to the various stakeholder of the firm. These stakeholders include management, shareholders, investors, taxation authorities and regulatory bodies. Similarly, this study will highlight a research area that is still scarcely investigated especially in Pakistan.

1.8. CONTRIBUTION:

1.8.1. THEORETICAL SIGNIFICANCE

Theoretically and methodologically this study is going to contribute in the existing empirical body of knowledge, as no such study conducted in Pakistan. This study is going to empirically test the

valuating tax planning or tax avoidance by the market participants in the corporate governance environment of Pakistan and ascertain its generalizability. Furthermore, it contributes to both governance and taxation literature by focusing on the implications of tax planning under the moderation of corporate governance and its impact on shareholder's valuation of the firm.

1.8.2. PRACTICAL CONTRIBUTION

This study provides insights for various stakeholders of the corporate arena of Pakistan. First of all, this study highlights to the tax authorities the extent of tax avoidance by the corporate sector. Further, it also indicates to the management regarding the ultimate end of their tax planning activities. That whether their indulgence in tax avoidance is bearing the desired results i.e. increase in shareholder's wealth or not. And provides insights as to how market perceives their indulgence in tax avoidance. Finally, it also improves awareness of the owners and investors in an emerging market like Pakistan by highlighting a key area of firm's financial decision making and potential managerial opportunism; and compelling them to incorporate tax related activities in their analysis.

1.9. ORGANIZATION OF THE STUDY

The first chapter of the study explains the relationship among Tax Planning and Firm Value and also the moderation effect of Corporate Governance on the relationship Tax Planning and firm value of non-financial Pakistani firms, backed by agency theory, legitimacy theory and signaling theory. Second chapter includes the literature review of empirical studies, conceptual frame work and the hypothesis of the study. Third chapter discusses methodology, variables and data of the study. While chapter four will discuss results and the last chapter will comprise upon discussion and conclusion.

CHAPTER 2

2. LITERATURE REVIEW:

The extant literature shows conflict of interests among the different stakeholders both in the corporate and in a broader social context with respect of tax planning. Therefore, theoretical research and its empirical findings are also characterized by a notable degree a diversity in its postulation of theory and empirical results. Some studies show that tax planning results in decrease in firm value or especially that the investors to some extent may reduce its stock prices, while others prove that tax planning is a favorable activity and result in increase in firm value (Lietz, 2013).

Traditionally tax planning is viewed to be a positive and favorable activity (Desai and Dharmapala, 2007). Tax sheltering practices result in reduced tax liabilities thus improving bottom line performance of the firms. Thus, in order to maximize their wealth shareholders prefer that the management to indulge in tax planning activities (Hanlon and Slemrod, 2009). Management often plans to lower the tax liability as otherwise it will lower the net corporate income. Minnick and Noga, (2010) also indicate the same that management intends to reduce tax liabilities to improve net income which is the primary indicator of firm performance. In fact, management is handsomely rewarded by the shareholders to engage in such activities. Studies have found that ability of firms to mitigate taxes effects their market value (Tiras and Wheatley, 1998) and that tax savings is viewed positively by investors while analyzing firms for investment purposes (Freeman, 1999). That is why, managerial actions that are purely for the purpose of reduction of corporate tax liabilities are considered to be increasingly becoming a significant aspect of US corporate activity

(Desai and Dharmapala, 2009). Tax avoidance results into immediate cash savings. These cash savings can be used for further investment that will lead to increased shareholder wealth and ultimately increase in share price for the firm. Or they can also be distributed among the shareholders in the form of cash dividends. Either way tax savings affect shareholder's wealth in positive manner (Annuar et al., 2014).

Further market participants may view tax avoidance as a favorable activity and accordingly re-access the valuation of the firm by increasing its stock prices (Lietz, 2013). Studies have found that ability of firms to mitigate taxes effects their market value (Tiras and Wheatley, 1998). Freeman (1999), found that investor use information from time management of taxes in their evaluation of firms. They value time deferrals of taxes as positive thing in their evaluation and find it an optimistic indicator regarding future earnings of the firm. Similarly, Tiras and Wheatley (1998) also found tax savings as value relevant and that firm's ability to mitigate taxes is viewed favorably by investors in their analysis of value of firm. They argue that the value of firm is dependent upon the expected performance of the firm to mitigate taxes. Wilson, (2009) while studying the valuation of involvement of a firm in tax sheltering activities by market found that at least in the short run the market view involvement of a firm in tax sheltering as positively. He observed that well governed firms exhibit positive abnormal return during the period of active tax shelter involvement as well as in the short-term period preceding and after its involvement in tax sheltering. Wilson (2009) implies that shelter activity creates shareholder value rather than significant reputational costs. Similar results have been found by Blaylock, (2016) and Wang, (2010) who found in their investigation that tax planning is value relevant and that it's a value enhancing activity. Finally, investors may also view positively the management involvement on

tax planning as the may presume that the managers of the firm are good stewards of the firm resources and that are acting for the purpose of profit and wealth maximization (Koester, 2011).

However, "such benefit of increased shareholder wealth as a result of tax avoidance practices results in some non-tax costs" (Annuar et al., 2014).). In addition to direct costs like fees and management remunerations there can be indirect costs such as corporate restructuring i.e. moving from home country to a tax heaven country (Wahab and Holland, 2012). Further "there is always the danger of penalties and defamation or loss of good will in case the tax authorities declare tax planning undertaken as illegal" (Hanlon and Slemrod, 2009). In particular Dharmapala and Desai (2006) argue that tax evasive activities may lead to reduction in the value of firm especially when firm's management has both opportunity and incentive to understate firm's income in order to reduce tax liabilities. Tax planning by the management is motivated by their personal interest and it can be harmful, especially in the absence of good corporate governance mechanism established in the firm, for the ultimate owners of the firms, further the market provided by the management is also not reliable. Accordingly, market participants may assume that the tax planning activities carried out by the management is for their own interest and therefore may discount the value of stock of the firm. On a similar note Guenther, Matsunaga, and Williams, (2013) documented that tax planning activities increases tax risk which is positively associated with overall firm risk i.e. an increase in tax risk of a firm results in increase in its overall risk. Thus, if shareholder or outside investor becomes aware of management is involved in tax planning he might view it as an increase in the overall risk of the firm and will, therefore, discount its share's value to accommodate itself for assuming the extra risk. Thus, the ultimate effect of tax planning will be negative on the market value of the firm. Hanlon and Slemrod, (2009), also provided empirical evidence in this regard. In their study, they found that, the share price of the firm falls when the news first reaches the market

regarding the involvement of the firm in tax avoiding activities. Likewise, Desai and Dharmapala (2007) argued that the tax evasion does not necessarily mean a direct increase in shareholder's wealth. In fact, they argued that tax planning activities gives birth to agency problems. Similarly, Goh, Lee, Lim, and Shevlin (2016) suggests a two-front negative impact of tax planning. First due to complementary relation between tax aggressiveness and rent extraction by the management which may eventually lower cash flow to the shareholders. Secondly, tax aggressiveness also increases information opacity which lowers the quality of information (Balakrishnan and Guay, 2012) communicated to the market participants who may react unfavorable in response (Lambert, Leuz, and Verrecchia, 2007). Accordingly, increase in shareholder's value as the supposed direct effect of tax savings may not necessarily be true and that it may be viewed as unfavorable during valuation of firm by the market participants (Dharmapala and Desai, 2006). Kim, Li, and Zhang, (2011) also studied the reaction of market participant with respect to firm's involvement in tax aggressive activities. They found evidence tax planning is positively associated with future crash risk of firm specific stock returns.

Similarly, legitimacy perspective posits that, if a firm is viewed as too much tax aggressive then the firm may bear reputational, political and social costs of being labeled a "poor corporate citizen" (Hanlon and Slemrod, 2009) and damage to organizational legitimacy may lead to potential price discount (Annuar et al., 2014). Investors may also attribute more relevance to the potentially negative consequences of tax planning in the form of socio-political costs, business loss, public outcry and heavy fines, in case of being caught. Consequently, investor may include these potential consequences in their analysis of stock price of a tax aggressive firm and may, therefore, discount it accordingly (Lietz, 2013).

As discussed above, there are two opposing perspective regarding the effect of tax planning on firm value. Traditionalists believe that, tax planning results in direct shift of resources from government to shareholders, thus increasing shareholders' wealth or firm value. While advocates of stakeholder and agency perspective posit that the direct and most obvious effect of tax planning is not increase in firm value. Rather tax planning is complex phenomenon that may result in direct and indirect immediate and future costs. Moreover, the empirical research in this regard also presents mixed results. The empirical research following this school thought reports that increase in the firm value as the direct and most obvious result of tax savings is not true.

Therefore, in the light of the discussion heretofore, the first hypothesis of this investigation is:

Hypothesis 1: *There is a significant relationship between Tax Planning and Firm Value.*

The above-mentioned relation is not directed, because as mentioned earlier the previous findings confirms relation of tax planning with firm value in both positive and negative manner.

On other hand, corporate governance of firm also acts a strong signal for the market while analyzing value implication of tax planning activities. Researchers believe that the much of the usefulness of tax planning for the depends on the corporate governance situation of the firm (Wahab and Holland, 2012; Annuar et al., 2014; Desai and Dharmapala, 2009; Hanlon and Slemrod, 2009; Bauer, 2015; Wilson, 2009; Kim, Li, & Zhang, 2011; Chen, Hu, Wang, and Tang, 2013; Cheung, Xiao, and Liu, 2014). Desai and Dhammika, (1998), argue that usefulness of tax planning greatly depends upon the governance mechanism of the firm. They observe that tax savings, especially in poorly governed firms will create opportunities for rent extraction by

management. Thus, the extent of positive effect of tax savings on the shareholder's value will depend upon the condition of corporate governance structures in that firm. Accordingly, market value of tax planning activities is moderated by the situation of corporate governance of the firm. Similarly, Badertscher, Katz, and Rego, (2013) have also argued about the importance of ownership and control structures in a firm for analyzing the impact of tax planning decisions. Minnick and Noga, (2010) on the other hand believe that investigating corporate governance with respect to tax management is important for two reasons. First, management has the opportunity for personal benefit or rent extraction. Further they believe that tax management involves significant uncertainty and may not benefit immediately thus it acts as long-term investment. Wahah and Holland, (2012) have also argued that corporate governance is controlling factor in the relation between tax planning and firm value. Similarly, Wilson (2009) and Hanlon and Slemrod (2009) document evidence that, the analyzing market response regarding and the valuation of tax planning activity by the market participants is conditional upon corporate governance status of the firm.

Desai and Dharmapala (2007) concluded after the analysis of the firms sampled for their study that tax avoidance has a larger positive effect on the firm value in firms with strong corporate governance structures. Similarly, in another study, Desai and Dharmapala (2006) pointed out that, during the 1990's the growth in incentive compensation has made its contribution to influence corporate managers to indulge in tax avoidance. They believe that the managers in firms are responsible for decisions regarding tax sheltering activities, especially in the weaker control environments they enjoy much independence that may even some times leads to rent extraction by them in the form of tax evasion. Tax management decisions can only be monitored effectively in the presence of efficient corporate governance mechanisms (Desai and Dharmapala 2006). Tax planning requires secrecy of financial information in order to hide the non-characterize transaction

especially designed for reducing tax liability from tax authorities. This financial secrecy results in opacity and asymmetry of information lending management ability to manipulate resources for their personal interest. This kind of financial secrecy makes it harder for outsiders to obtain the true picture of firm's position making it possible for the management to milk the tax savings for their own interests. However, effective cooperative governance ensures transparency regarding firm's financial matters which makes rent extraction by the management difficult (Desai, Dyck, and Zingales, 2004). While studying the valuation of market participants regarding involvement of firm in tax sheltering activities Wilson (2009) observed that well governed firms show positive abnormal return during active tax sheltering time period and also in short term of pre and post sheltering period. Chen, Hu, Wang, and Tang, (2013) investigated tax evasion with respect of family firms and their governance structure. They found that family firms with higher level institutional investors exhibit higher tax sheltering. They proposed that institutional investors improve corporate governance of the family firms thus refraining management from rent extraction in the shape of tax evasion and thus ultimately motivating to design and implement tax planning schemes for the benefit of profit or wealth maximization.

On other hand, there are numerous researchers that emphasizes upon studying corporate tax management activities with reference to legitimacy perspective. The CSR-tax avoidance studies represent the stakeholder-legitimacy perspective in the tax avoidance literature. CSR activities comprises of all the activities of the firm that affect its owners, customers, employees, competitors, community and government. From this perspective, any action of the firm that harm any of the firm's stakeholder is negative CSR. As corporate tax evasion reduces government's revenue and consequently its ability to serve society at large. Thus, tax aggressive behavior according to the legitimacy-stakeholder perspective is a negative CSR (Hoi, Wu, and Zhang, (2013). The popular

notion in legitimacy perspective is that it is responsibility of the firm that it should pay its fair share of taxes that are lawfully levied upon by the government of the country they are operating in (Christensen & Murphy, 2004). In their investigation related to CSR disclosure and corporate tax avoidance Lanis and Richardson, (2012) have analyzed a sample of 408 publicly listed companies in Australia for the years of 2008-09. They found a negative relation between CSR disclosure and tax avoiding activities. Their findings are consistent with the popular notion that socially responsible companies will be less tax aggressive. In a similar study Hoi et al., (2013), found that there is a direct relation between tax evasion and irresponsible CSR activities.

Lanis and Richardson (2011) studied the relation between composition of board of directors and tax aggressiveness following legitimacy perspective. The argued that "taxes are one of the important factor which considered by the management while making various business decisions. Consequently, managerial decisions solely designed to reduce corporate tax liability using various avoidance schemes has become a ubiquitous in corporate sector in most of the countries thought out the world". They claimed that tax management decisions are relevant to not only management and shareholders but in fact they influence society as a whole. Richardson, Taylor, and Lanis, (2013) observed that, "that aggressive tax management is not just detrimental to corporations rather it is considered as illegitimate and socially irresponsible activity which ultimately affects the society as a whole". Lanis and Richardson, (2011) posit that, in addition to the agency framework they argued that tax planning should be analyzed through legitimacy and stakeholder framework. They observed that the corporations strive to legitimize their existence in the society and thus an effective board would pursue to limit the tax aggressive policies of the management. In their research, they applied various regression models on the relation between board composition and tax aggressiveness. They found that, independent directors are negatively related

to tax planning and that this relation is statistically significant across all the regression models they employed.

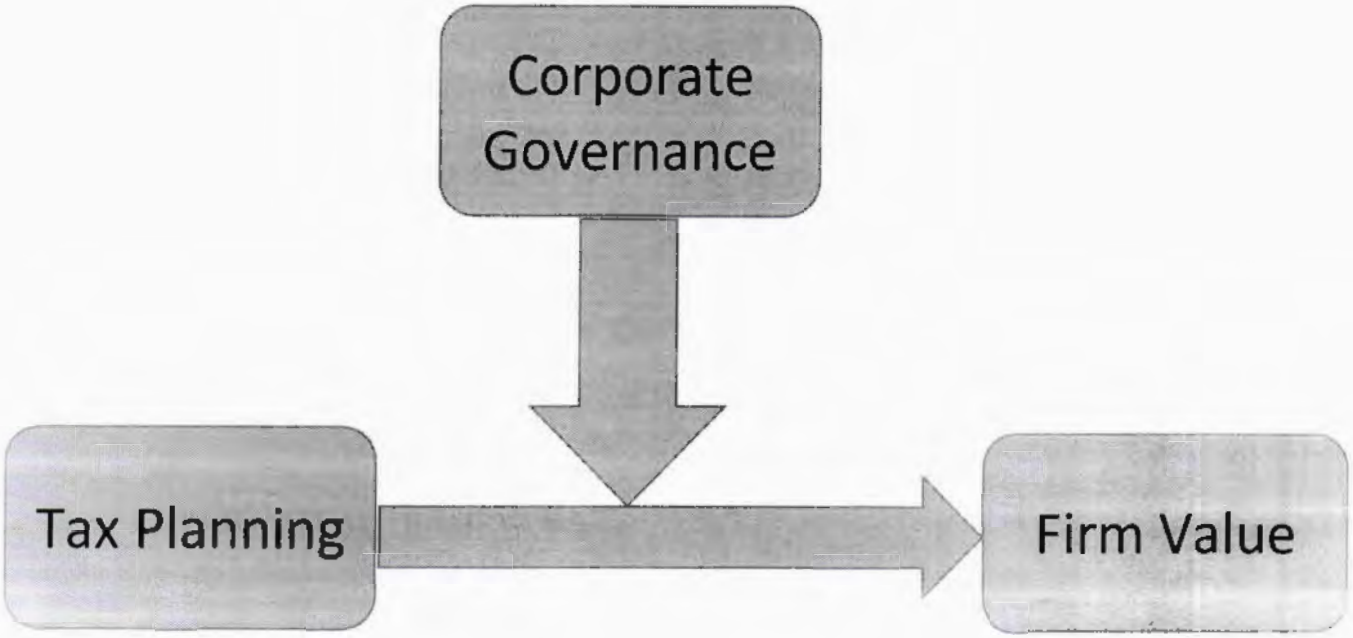
Therefore, as mentioned in the above lines, the importance of corporate governance cannot be ignored while investigating corporate tax planning. Thus, second hypothesis relates to the moderating role of Corporate Governance on the relation between tax planning and firm value. Dharmapala and Desai (2006), have argued about the potential role of corporate governance in monitoring the management actions regarding tax planning. They report that market views tax planning activities with skepticism and only the presence of properly functioning governance mechanism offsets the market suspicion about them (Desai and Dharmapala, 2007). In a previous study, Desai and Dhammika (1998), concluded that tax planning positively effects the firm value only in the presence of strong governance structures. Furthermore, Annuar et al., (2014) also proposes the likelihood of interactive role corporate governance while examining the tax planning decisions. Similarly, Wilson (2009) and Hanlon and Slemrod (2009) also argue that the valuation of tax planning activity by the market participants is conditional upon corporate governance of the firm. Thus, in the light of the discussion heretofore, following is the second hypothesis of this study;

Hypothesis 2: Corporate Governance strengthens the positive impact of Tax Planning on Firm Value.

In nutshell, traditionalist view tax planning or tax management as beneficial for the shareholders. Any tax savings is considered as direct increase in the shareholders' wealth. However, recent research indicates that it is not the case. In fact, tax planning gives birth to numerous agency

problems. Tax planning results in opacity and increased financial secrecy which provides cover for management's activities. This increased opacity and financial secrecy can lead to management's indulgence in rent extraction and use of tax savings for personal interest. Tax planning, on the other hand, is also associated with increase in tax risk and overall risk of firm. Further there are other direct and indirect costs of tax planning such as fees, fines, penalties and etc. that also reduce the viability of tax planning. On the other hand, tax planning is also harmful for the numerous stakeholders of business, which affects the legitimacy of organization that can result in social and political cost or can ultimately threaten the very existence of organization. These negative implications impact the perception of market participants regarding the valuation of tax planning activities. Further, researchers posit that, corporate governance mechanism has the potential to control and regulate management's tax planning activities. A strong governance structure inside the firm ensures that any sort of tax planning undertaken by the management is in the interest of shareholders and checks the management indulgence in rent extraction or use of tax planning measures for personal interests. Accordingly, corporate governance of a firm also acts a strong signal to the market and moderates market valuation of tax planning activities.

2.1. CONCEPTUAL FRAMEWORK:



CHAPTER 3

3 RESEARCH METHODOLOGY:

3.1 RESEARCH DESIGN:

Leedy and Ormrod, (2005) define research design "as a strategy for investigating the problem at hand, providing the overall outline for collection of required data". Parahoo, (1997) has defined research design as "a plan that describes how, when and where data are to be collected and analyzed". McMillan and Schumacher, (2001) define it "as a plan for selecting subjects, research sites, and data collection procedures to answer the research questions". It refers to the structure of the enquiry which ensures that the research questions are sufficiently and unambiguously answered.

This investigation is explanatory in nature and follows longitudinal research design. Explanatory study answers what and why questions of any social or natural phenomenon. In order to sufficiently and unambiguously answer the research questions raised in the previous chapter, this study follows longitudinal research design. Deschenes (1990) defines longitudinal research design as the research design which involves measurement over time with respect to two or more research subjects. longitudinal research design is superior than other research design as it quantifies behavior, describes its trends over time in order to investigate the changes occur in these behaviors over time. This type of research design is also considered superior to other designs while investigation firm's behavior as it enables the researchers to examine processes and causes among and within entities (Deschenes, 1990).

3.2 POPULATION, SAMPLE AND DATA COLLECTION:

Population is generally defined as total number of units i.e. individuals, firms, organizations, countries etc. from which that is to be gathered for the purpose of answering the research question in hand (Parahoo, 1997). The population of this investigation comprises of non-financial publicly-traded companies listed on Pakistan Stock Exchange or PSX (formerly known as Karachi Stock Exchange or KSE). Financial firms listed at PSX are not included for the purpose of this study as their financial structure required due to statutory laws may result in hampering the results of the study.

As collection of data in respect of the whole population is not feasible due various constraints a sample i.e. a portion of the whole population (Polit and Beck, 2003) has been selected on the basis of convenience sampling for the purpose of analysis. As listed companies in Pakistan are required to publish their annual reports shortly after the year end firms were selected on the basis of availability of this publicly available data regarding corporate governance and financial aspect of the firms. The process of sample selection commenced with preparation a list of public listed companies that were listed throughout the whole sample period and then upon the checking the availability of required financial and corporate governance information publicly published in their annual reports, at the year end, for the whole sample period, those firms were selected and included in the sample.

The study employs a balanced panel dataset of large sample comprising of non-financial publicly-traded companies listed on Pakistan Stock Exchange. The data is collected for the period of 10 years i.e. from year 2006-2015 in respect of 117 non-financial companies listed at PSX. The sample period for 10 years was selected for two reasons. Firstly, to ensure the reliability of the estimation, secondly to incorporate only those companies in the study that comprise main market

as they have been part of the market for at least more than a decade and to ignore "young and growing companies" as they would likely to have low effective tax rate due to losses in the initial years of their incorporation the estimation due to their inclusion may become spurious. Moreover, sample for this investigation includes only non-financial companies listed on Pakistan Stock Exchange as firms in the financial sector have specific regulatory requirements which may hamper the results of the study.

The data collected for this investigation can be further categorized into three sub categories i.e. Market related financial, tax related data and data regarding firm's corporate governance. Data used in this study is of secondary nature and have already been made public by the companies in their annual reports or by Pakistan Stock Exchange. Market related data is collected from the website of Pakistan Stock Exchange and KhiStock.com run by business newspaper Business Recorder.

On the other hand, tax related data has been gathered from the annual reports published by the firms at year end specifically from profit and loss statement published in the financial reports and notes on tax section were consulted for verification. Finally, data on corporate governance was handpicked from the year-end financial/annual reports. Composition of board, composition of audit committee, size of board and audit committee was mostly collected from the introduction section, while information on the ownership structure was collected from the shareholding pattern section of these published reports. Various types of data and their sources are presented in Table 3.1 in a summarized manner.

Table 3.1		
Data Sources		
Type of Data	**Source**	**Extracted Information**
Market Related Data	Official Website of Pakistan Stock Exchange; Khistocks.Com (Run by Business Recorder)	Market Value of Equity
Accounting Data	Annual Reports i) Profit and Loss Statement ii) Balance Sheet iii) Notes on Taxation	i) Current Year Tax Expense ii) Book Value of Equity iii) Statutory Tax Rate iv) Total Assets, Earning Management and Leverage
Corporate Governance Data	Annual Reports i) Directors Report ii) Patter of Shareholding Section	i) Composition and size of board ii) Composition and size of Audit Committee iii) Ownership structure

3.3 VARIABLES:

3.3.1 DEPENDENT VARIABLE:

This investigation is being carried out in order to evaluate the impact of tax planning on firm value. Accordingly, following Jacob and Schuett, (2015) this study focuses on the market-to-book equity ratio as a proxy of firm value, because it is commonly used in the growing literature on the valuation implications of tax avoidance to proxy for value of firm. In a similar study Simone et al., (2014) has used market-to-book equity ratio while evaluating the impact of tax risk on firm value. The ratio is obtained after dividing market value of equity by book value of equity. Mathematically the ratio can be represented as: -

$$Firm\ Value_{(i,t)} = \frac{Market\ Value\ of\ Equity_{(i,t)}}{Book\ Value\ of\ Equity_{(i,t)}}$$

3.3.2 INDEPENDENT VARIABLE:

The independent variable in this study is tax planning. In research, the tax planning has been defined in several ways primarily based upon the legality of the transactions involved. Researchers try to differentiate these transactions into tax avoidance, tax minimizing activities that are legal but unethical, and tax evasion, transaction that are carried out for the purpose of tax savings but are illegal in nature. Further, academics have also developed measures to capture tax planning based upon timings, deferrals, and accrual and actual cash payment of the tax expense. This study however uses Book-Tax Gap put forth by Desai and Dharmapala (2009) for the purpose of measuring tax planning. The Book-Tax Gap measures tax planning as the difference between financial income and income reported tax authorities. The product of the difference is deflated by total assets of the firm to control for firm's scale (Desai and Dharmapala, 2009).

Mathematically;

$$TP_{(i,t)} = \frac{PBT_{(i,t)} - \frac{TE_{(i,t)}}{TR_{(i,t)}}}{TA_{(i,t)}}$$

Where; TP is tax planning; PBT is current year profit before tax; TR (tax rate) is the current corporate tax rate in Pakistan; TE is the current year tax expense; and TA is the current year total assets. In order to normalize the variable natural log of the of the above calculated $TP_{(i,t)}$ has been taken, before estimation of the models.

3.3.3 MODERATING VARIABLE:

In this study we use corporate governance as moderator variable that we assume effects the relation between tax planning and firm value. Gillan and Starks (1998), define corporate governance as "the system of structures, rules, and laws that regulate or govern operations at a company". According to them governance comprises of a set of structures in and outside of the firm which provides boundaries for its operations. Shleifer and Vishny, (1997), define corporate governance in economic terms. Shleifer and Vishny, (1997), define corporate governance as "ways in which financers of firms assure themselves of receiving a return on the investments they have made."

Annuar et al., (2014) and Desai and Dharmapala (2007) have proposed the potential moderating role of corporate governance for mitigating the potential agency conflict that may arise through tax planning. Following lines explains how corporate governance of individual firms is measured in this investigation

3.3.4 CORPORATE GOVERNANCE

Researchers have used different proxies while measuring corporate of firms. Some have relied on using these proxies individually especially in the cases where the intention was to investigate the individual effect of each aspect of corporate governance on the issued at hand. While others have used the proxies collectively in the form of some index of points rating system, in order to measure the corporate governance of the individual firms. Such and index was developed by Gompers, Ishi, and Metrick, (2003), while investigating the impact of corporate governance on equity prices. They constructed a "Governance index" in order to measure corporate governance on the basis of power division between shareholders and managers. Their index is based upon Corporate Takeover

Provisions that makes it difficult for a hostile takeover. The total provisions included in their index are 24, classified into five main categories i.e. state laws (State), director/officer protection (Protection), voting rights (Voting), tactics for delaying hostile bidders (Delay) and other takeover defenses (Other). The Delay group includes four provisions designed to slow down a hostile bidder. The Voting group contains six provisions, all related to shareholders' rights in elections or charter/bylaw amendments. There are six provisions in the protection sub-category designed to secure the jobs of officers and directors against job related liabilities or to compensate in case of their termination. The Others sub-categories contains six-remaining firm-level provisions. While the state sub-category contains the rules provided by the state against hostile takeovers. In their index for every provision that reduces shareholders' power they add one point to the firm. So, a firm with high rating on the index means that management has more power as compared to the shareholders and are placed in the "Dictatorship Portfolio". They are referred as weakest shareholder power and highest management power. Whereas firms that have low ratings on the portfolio are referred as high shareholder power and weak management power.

Similarly, following Gompers et al., (2003), Bebchuk, Cohen, and Ferrell, (2009) constructed Entrenchment Index that measures how much the management of the firm is entrenched as compared to the power of shareholders. The Entrenchment Index comprises of six provisions four of which relates to limiting the shareholders' voting power and two of them relates to takeover readiness. The provisions limiting voting powers of shareholders include, staggered board, limitations of amending by laws, limitation on amending charter of the company, super majority for approval of a merger. While the takeover readiness provision includes poison pill and golden parachute. All the provision in the index are weighted equally. In case of the presence of a provision one point is added in the index otherwise zero. Hence, a firm with a score of six means

the management of the firm is highly entrenched and the power of shareholders of the firm is limited.

Chen, Kao, Tsao, and Wu, (2007) constructed a "governance index" from the viewpoints of leadership and ownership. Four main features of the corporate governance structures are considered. These features are managerial ownership, number of directors on the board, CEO duality, and individual block shareholders' holding. Each indicator variable includes in the "governance index" (Chen et al., 2007) set as 1 for each characteristic that is supposed to improve the performance of the firm, otherwise the indicator variable is set as 0. For example, in small firm's CEO and Chairman of the firm is same person is considered to be a good indicator for strong and clearer leadership, whereas in large firms it is not seen as favorable because of agency conflict that may arise due to it. The governance index or measure is obtained after the addition of the four binary variables. An index of 4 means that the firms has strong corporate governance structure which leads to high performance and are valued higher while index value of 0 of a firm means that the firms as a weak corporate governance which leads low performance and is therefore valued lower.

This investigation is following Shah and Butt (2009) for measuring corporate governance of individual firms. Shah and Butt (2009) uses a corporate governance index to measure corporate governance of a firm. The method used to develop the index is discussed in Appendix-B (Shah and Butt, 2009). Following are the main proxies used for development of index for measurement of corporate governance: -

i. Ownership Structure
   Percentage of number of shares held by Directors.

ii. Ownership Concentration
   Percentage of number of shares held by Top 20 shareholders.

iii. Board Independence
Number of Independent Non Executive Directors divided by Total Number of Directors.

iv. Audit Committee Independence
Number of Independent Non Executive Directors divided by Total Number of Audit Committee Members

3.3.5 CONTROL VARIABLES:

This section explains the variables selected in order to control for the potential effects that may be due to the following variables which may affect the true value of the coefficient of tax planning. Therefore, in order to ensure that the results of primary independent variable of this study i.e. tax planning are not affected by the firm specific characteristics following variables are selected for control purposes. These variables are selected on the basis that they were found in the extant literature related to tax planning in a direct or indirect manner. Following are the variables included as control variables in this investigation:

i. Earning Management

The basic intuition underlying the inclusion of earning management as control variable is that the proxy used in this study for the purpose of estimation of tax planning is not exhaustive measure and that both tax planning and earning management are associated (Yorke, Amidu, and Agyemin-boateng, 2016). Therefore, in order isolate the component of earning management from tax planning it is used as a control variable in the investigation. Following Desai

and Dharmapala (2009) earning management has been calculated as per following formula:-

$$
\begin{aligned}
&\textit{Earning management} \\
&= [(\textit{Current Assets}_{(t)} - \textit{Current Assets}_{(t-1)}) \\
&+ (\textit{Current Liabilities}_{(t)} - \textit{Current Liabilities}_{(t-1)}) \\
&+ (\textit{Cash \& Short Term Investment}_{(t)} \\
&- \textit{Cash \& Short Term Investment}_{(t-1)}) \\
&+ (\textit{debt in current liabilities}_{(t)} - \textit{Debt in current liabilities}_{(t-1)}) \\
&+ (\textit{Depriciation \& Amortization}_{(t)} \\
&- \textit{Depriciation \& Amortization}_{(t-1)})] \\
&\div [\textit{Opening value of total assets}_{(t)}]
\end{aligned}
$$

ii. Leverage

Leverage is included in the control variables in order to control tax shield provided by the interest. As leverage can be found interrelated with tax planning due to its ability to reduce tax liabilities. Therefore, in order to obtain true result of tax planning on firm value leverage is included in the control variables for this study. This variable measured as ratio of Long Term Debt and Total Assets.

iii. Firm Size

Following Rego and Wilson (2012) firm size has been included in the study to control the impact of firm's size on tax planning. They observe that tax planning

results in economies of scale in larger firms which have the resources and incentive to decrease group tax. As firm size and tax planning are associated so in order to avoid the effects of firm size on the result in respect of tax planning the said variable is included as control variable in the study. It is measured as year-end Total Assets of the firm.

A complete list of variables used in this study along with the methods to calculate them is presented in Appendix-A at the end.

3.4 ESTIMATION MODELS:

Following, Wahab and Holland (2012) and Desai and Dharmapala (2009) in order to measure the impact of tax planning on firm value and under the moderating effect of corporate governance three separate models are used.

Model- 1

$$FV_{(i,t)} = \alpha + \beta(TP_{(i,t)}) + \beta(EM_{(i,t)}) + \beta(LEV_{(i,t)}) + \beta(Size_{(i,t)}) + \xi_{(i,t)}$$

FV represents Firm Value calculated vide market to book equity ratio. TP represent Tax Planning variable calculated as the difference between tax owed at statutory rate and actual tax paid in the year. EM, LEV and Size are the control variables namely Earning Management, Leverage, and Firm Size respectively. While $\xi_{(i,t)}$ represent the error term in the model. This model captures the effect of tax planning on the value of firm after controlling for various firm specific variables. The

model shows whether or not the shareholders or market respond to tax planning carried out by the firm. Agency theory suggests that the effect of tax planning on firm value will be negative especially in the absence of good corporate governance mechanism in the firm. However, shareholders feel confident about the tax planning carried about by the management in case there exists a strong governance mechanism. In such cases shareholders believe that the tax planning efforts of the company are in their favor and management is not pursuing its own interest. They believe that management actions are properly monitored and that it is impossible for management divert resources while engaging in tax planning activities. Following models explains the role of corporate governance in the relation between tax planning and firm value.

Model- II

$$FV_{(i,t)} = \alpha + \beta(TP_{(i,t)}) + \beta(CG_{(i,t)}) + \beta(EM_{(i,t)}) + \beta(LEV_{(i,t)}) + \beta(Size_{(i,t)}) + \xi_{(i,t)}$$

The above model captures the impact of tax planning and corporate governance on value of firm. CG variable represents the corporate governance proxy calculated as discussed above.

Model- III

$$FV_{(i,t)} = \alpha + \beta(TP_{(i,t)}) + \beta(CG_{(i,t)}) + \beta(TP_{(i,t)} * CG_{(i,t)}) + \beta(EM_{(i,t)}) + \beta(LEV_{(i,t)}) + \beta(Size_{(i,t)}) + \xi_{(i,t)}$$

The above model captures the moderating effect of corporate governance on the relation of firm value and tax planning. As discussed earlier, the effect of tax planning on firm's value is negative. However, this relation is moderated by corporate governance of the firm. A strong corporate

governance mechanism moderates the effect of tax planning in such a way that market and shareholders alike believe that the board is properly monitoring the tax planning activities of the management leaving no room for it to indulge in diversionary activities. Therefore, whatever actions is taken by the management for the purpose of tax planning is for the benefit of shareholders only.

CHAPTER 4

4 RESULTS AND ANALYSIS:

Following lines discuss the analyses performed on the sampled data and discusses the results obtained from those analyses. As the data set in the study is panel data therefore panel regression model has been used for estimation of the relation between independent and dependent variable. The two frequently used techniques within panel regaression model that are used in finance and economics literature are fixed and random effects. This study uses fixed effects panel data analysis technique, as specified by the Hausman specification test. Various analyses performed on the data are dicussd below:-

4.1 DESCRIPTIVE STATISTICS

Table 4.2 shows descriptive statistics regarding the sample used in this study comprising of non-financial firms listed at Pakistan Stock Exchange (PSX). The sample consists data in respect of 117 number of companies for a period of 10 years i.e from 2006 to 2015. Average GAAP ETR of the companies included in the sample is 31.2% in other words the average tax saving of about 3.8%. This indicates that on average firms indulge in tax planning in order to minimize their tax liability. The Corporate Governance of firms is calculated using index used by Shah and Butt (2009).The mean score of the Corporate Governance Index is 4.13 with a minimum value of 2 and maximum value of 8.2. Further investigation of the proxies used to calculate the corporate governance index show that the mean of management ownership i.e. percentage of shares owned by the directors is 17.7% with a minimum value of 0% and maximum value of 92.8%. The mean

value of Top20 i.e. Top 20 shareholders is 83.3% with minimum value of 2.7% while maximum value of 99.9%. This indicates a highly concentrated ownership structure in the firms included in the sample. The mean value of the percentage of independent directors in the board is 16% percent which indicate on average 1 member in the board of directors is independent among the companies included in the sample. While the mean of percentage of independent directors in the audit committee is 0.007%.

Table 4.2:

Descriptive Statistics:

Variable		Mean	Std. Dev.	Min	Max	Observations	
FV	overall	0.830783	1.554999	0.008521	20.73973	N	1170
	between		0.312318	0.482604	1.320132	n =	117
	within		1.526485	-0.458496	20.53318	T =	10
TP	overall	0.005883	0.129787	-2.015741	1.886664	N =	1170
	between		0.010156	-0.00558	0.028014	n =	117
	within		0.129429	-2.005902	1.864533	T =	10
lnTA	overall	22.57374	1.518846	17.23214	27.04005	N =	1170
	between		0.292802	22.08083	23.00523	n	117
	within		1.493208	17.2698	26.6521	T	10
EM	overall	0.214133	2.495633	-4.113399	83.79708	N =	1170
	between		0.277955	-0.14722	0.901538	n =	117
	within		2.481651	-4.230128	83.10968	T =	10
LEV	overall	0.207393	2.735061	0	93.38859	N =	1170
	between		0.258351	0.096347	0.939766	n =	117
	within		2.724048	-0.732373	92.65622	T =	10
CGScr	overall	4.130299	0.930092	2	8.2	N =	1170
	between		0.073426	3.973504	4.25	n =	117
	within		0.927478	1.880299	8.238419	T =	10
CGScrXTP	overall	0.02244	0.541725	-9.1	7.169325	N	1170
	between		0.039201	-0.017443	0.103969	n =	117
	within		0.540446	-9.091987	7.087796	T =	10
MgtOwnShp	overall	0.177281	0.241822	0	0.928529	N =	1170
	between		0.229404	8.14E-07	0.804299	n =	117
	within		0.079312	-0.412629	0.739328	T =	10

Table 4.2:

Descriptive Statistics (continued):

Variable		Mean	Std. Dev.	Min	Max	Observations	
Top20	overall	0.833229	0.148577	0.027639	0.999634	N =	1170
	between		0.01317	0.81939	0.852426	n =	117
	within		0.14805	0.041478	1.013465	T =	10
INDBd	overall	0.164503	0.212981	0	0.928571	N	1170
	between		0.025116	0.110328	0.198948	n	117
	within		0.211643	-0.034445	0.92298	T =	10
INDAC	overall	0.080737	0.1626	0	1	N =	1170
	between		0.086781	0.013024	0.237403	n =	117
	within		0.140197	-0.156667	1.066492	T =	10
MgtOwnXTP	overall	0.001598	0.032598	-0.408101	0.659255	N =	1170
	between		0.002499	-0.001609	0.006122	n =	117
	within		0.032511	-0.406993	0.65473	T =	10
T20XTP	overall	0.004803	0.115789	-1.810491	1.864943	N =	1170
	between		0.00881	-0.003313	0.025093	n =	117
	within		0.115487	-1.802375	1.844652	T =	10
IndBdXTP	overall	0.000681	0.028392	-0.795918	0.130142	N =	1170
	between		0.001199	-0.001326	0.002007	n =	117
	within		0.028369	-0.794903	0.131157	T =	10
IndACXTP	overall	0.000254	0.017629	-0.497897	0.058168	N =	1170
	between		0.000876	-0.001525	0.001628	n =	10
	within		0.01761	-0.496118	0.059947	T =	117
GAAPETR	overall	0.312947	2.237973	-50.94093	30.37847	N	1170
	between		0.235966	-0.16904	0.775733	n =	10
	within		2.226739	-50.45894	29.91568	T =	117
CGScrXGAAPETR	overall	1.187959	8.063615	-193.5755	118.2002	N =	1170
	between		0.854652	-0.560048	2.851692	n =	10
	within		8.022714	-191.8275	116.5365	T =	117

4.2 OUTLIERS AND INFLUENTIAL OBSERVATIONS:

According Hair, Babin, and Anderson (2006) "outliers are the observations that are substantially different from the other observations". According to Fox (1991) "an outlier is an observation whose dependent variable value is unusual given the value of independent variable". On the other hand as David A. Belsley, Edwin Kuh, and Roy E. Welsch (2004) observe that "an influential observation is one which, either individually or together with several other observations, has a demonstrably larger impact on the calculated values of various estimates (coefficients, standard errors and t-values etc.) than is the case for most of the other observations". Hair et al., (2006) define influential observations as "one that has disproportionate effect on one or more regression aspects".

The outliers in the sampled data are identified using studentized residuals (David A. Belsley et al., 2004). The outliers have been determined based on value of studentized residual greater than |3| as this indicates a large observation's residual showing a possibility of unusual value of regressor. After performing the required analysis, 20 observations in respect of 10 companies were found as outliers. In order keep the data set balanced remaining observations regarding the concerned companies were also excluded from the sample set. Accordingly, 100 observations (10 companies) were excluded from data set i.e. 8.54% of full sample. Observations with studentized residual greater than |3| are presented at Table 4.1.1: -

Table 4.1.1

Observations with values of r-student > |3|:-

	rstudent	
Obs	Company	rstudent
113	UPFL	4.05414
230	UPFL	8.687092
347	UPFL	6.503164
464	UPFL	4.870666
475	ATBA	5.21586
839	COLG	5.015695
863	GHGL	3.232401
878	KEL	13.58771
899	PAKT	4.378231
951	BWHL	3.467572
956	COLG	4.923578
1001	KTML	7.497019
1010	NATF	4.909288
1016	PAKT	7.520216
1029	RMPL	4.48752
1049	UPFL	8.869111
1068	BWHL	8.870614
1073	COLG	3.503171
1127	NATF	3.492318
1133	PAKT	6.860786

The data set has also been tested for influential observations using Cooks-d stat. The observations were considered as influential based on Cooks-d value > 1. In total 4 observations were found influential on the basis of aforementioned criteria relating to four separate companies, including 1 observation related to the company that was already identified as outlier. Therefore, after

performing tests for influential observations thirty observation relating to three companies were excluded from further analysis. Observations with Cooks-d >1 are presented at Table 4.1.2: -

Table 4.1.2

Observations with values of Cooks-d > 1:

	cooks-d	
Obs	Company	cooks-d
389	FEROZ	2.135236
475	ATBA	1.358515
626	FRSM	3.005053
1168	WTL	1.023131

Subsequent to performing tests for influential and outlier observations, a total number of 130 observations relating to 13 companies from the original sample of 117 companies were excluded from further analysis i.e. 11.11% of the original sample. Resultantly the reduced sample comprises of 1040 observations relating to 104 companies containing data regarding variables included in the study for the years 2006-2015.

4.3 MULTICOLLINEARITY:

According to Hair et al., (2006) multicollinearity is a condition in which the regressors in a regression model are correlated with each other. Various methods are in use for identifying the multicollinearity in the data. This study uses variance decomposition matrix recommended by Belsley et al., (2004) for determining presence of multicollinearity among regressors used in the study.

In order to identify any sort of multicollinearity among the regressors correlation matrix has been used. As per Hair et al., (2006) a correlation value of 0.90 or above or -0.90 or below among two variables indicates presence of collinearity among them. Table 4.3.1 and 4.3.2 presents the correlation matrix of variables used in the study. Two separate correlation matrices have been obtained. One with the inclusion of corporate governance index as proxy for measurement of corporate governance of firms. While second correlation matrix has been obtained by inclusion of corporate governance proxies used to calculate the governance index are included instead of the corporate governance index.

Table 4.3.1:

Correlation Matrix (Corporate Governance Index)

	FV	TP	lnTA	LEV	EM	CGScr
FV	1					
TP	0.14	1				
lnTA	0.1214	0.0349	1			
LEV	-0.1974	-0.193	0.0598	1		
EM	0.0193	0.0541	0.0396	-0.0016	1	
CGScr	0.1203	-0.0006	0.2453	-0.017	-0.0257	1

Table 4.3.1 shows that there is no value in the correlation matrix higher the than threshold level. Therefore, it is concluded that there is no correlation among the independent variables. On the other hand, table 4.3.2 also indicates that is there is no value in the correlation matrix that is higher than the critical value as discussed earlier. The correlation matrix, therefore, shows absence of any sort of collinearity among the regressors used in the study.

Table 4.3.2:

Correlation Matrix (constituent proxies of Corporate Governance)

	FV	TP	lnTA	LEV	EM	MgtOwnShp	Top20	INDBd	INDAC
FV	1								
TP	0.14	1							
lnTA	0.1214	0.0349	1						
LEV	-0.1974	-0.193	0.0598	1					
EM	0.0193	0.0541	0.0396	-0.0016	1				
MgtOwnShp	-0.1843	0.0174	-0.2199	0.0994	0.0208	1			
Top20	0.0107	-0.0524	-0.0907	-0.0555	-0.0305	0.1917	1		
INDBd	0.0659	-0.0085	0.0973	0.0097	-0.0252	-0.184	-0.0389	1	
INDAC	0.1236	0.0079	0.2749	-0.0812	-0.0332	-0.0842	0.0321	0.2531	1

Correlation matrix explains the existence of the correlation among two variables, however, it does not certify the existence or non-existence of collinearity among two variables. In order to further investigate the data for multicollinearity among the regressors Variance Inflation Factors (VIF) in respect of the regressors used in this investigation have been obtained. VIF measures the multicollinearity among the regressors by inversing the tolerance value. Tolerance value is the degree of change in the independent variable not caused by the other independent variables included in the model (Hair et al., 2006). Thus, a high value of VIF indicates the existence of multicollinearity. Normally, VIF of 10 or above shows that the regressors are collinear with other independent variables of the model. Table 4.3.3 and 4.3.4 presents VIFs of the regressors used in the study.

As previously, two separate tables of VIF values have been obtained for the regressors included in the study. Table 4.3.3 represents the VIF values for the regressors with the inclusion of Corporate Governance Index as the measure of corporate governance of the firm. Table 4.3.4 represents VIF values with constituent proxies of corporate governance used to calculate the corporate governance index. Table 4.3.3 shows that there is no variable with VIF higher than 10. Similarly, table 4.3.4 also indicates that there is no variable that have VIF value higher than the critical value of 10. Thus, according to VIF analysis of the regressors used in the study absence of any sort of multicollinearity among the independent variables is confirmed.

Table 4.3.3

VIF values of Regressors (Corporate Governance Index)

Variable	VIF	1/VIF
lnTA	1.07	0.932984
CGScr	1.07	0.938451
LEV	1.04	0.95711
BT	1.04	0.958025
EM	1	0.996136
Mean VIF	1.05	

Table 4.3.3

VIF values of Regressors (constituent proxies of Corporate Governance)

Variable	VIF	1/VIF
INDAC	1.17	0.856422
lnTA	1.15	0.867603
MgtOwnShp	1.14	0.878585
INDBd	1.10	0.90691
LEV	1.08	0.926156
Top20	1.06	0.946688
BT	1.05	0.951127
EM	1.01	0.992785
Mean VIF	1.09	

4.4 HETEROSKEDASTICITY:

One of the assumptions of the regression analysis is that the data should be homoscedastic. According to Fox, (1991), "regression analysis assumes that the variation of the dependent variable across the regression surface – the error variance – is everywhere the same i.e. $V(\varepsilon) = V(y|x_1, x_2, \ldots, x_k) = \partial^2$". Contrastingly, a non-constant error term across the cross section is called heteroskedasticity. According to Hair et al., (2006) "Homoscedasticity means the assumption that the regressed variables show same level of variance across the range of regressors used for the estimation. It is desirable due to the reason that the variance in predicted variable(s) being explained in a causal relationship should not be concentrated in only a limited range of predictor variable(s). In most of the cases we have at each value of predictor variable we have numerous different values of regressed variable. Therefore, in order to satisfactorily capture the relationship,

at each value of independent variable the variance of the predicted variable must have to be relatively equal. In case this variance or dispersion is not equal across the values of predictor variables the relationship is considered as heteroskedastic". Heteroskedasticity in the data leads to unequal explanation of dependent variable by each regressors. This leads to incorrect estimation of the standard errors of the model and, therefore, biased estimation of the model. Accordingly, following Greene (2012) a modified Wald statistic for group-wise heteroskedasticity in the residuals of a panel data regression models. The null hypothesis of the test is that the data is homoscedastic. Table 4.4.1 presents the results obtained for the aforementioned test conducted on the data set in order to check whether the it is homoscedastic or otherwise:

Table 4.4.1:

Modified Wald Test for Groupwise Heteroskedasticiy in Panel Data: -

Modified Wald test for groupwise heteroskedasticity in panel data regression model	
H0: sigma(i)^2 = sigma^2 for all i	
chi2 (104)	64529.96***

Note: ***, and ** indicate significance at 1% and 5% respectively.

The p-value of the result shows that we cannot accept the null hypothesis of the homoscedasticity of the data. Accordingly, as per the results of modified Wald statistic test for group wise heteroskedasticity in panel data models the data set used for the study is heteroskedastic. As the

data is heteroskedastic in nature, therefore, this study uses Eiker-Huber-White robust standard errors while estimating models.

4.5 AUTOCORRELATION:

According to Greene, (2012) a correlation between a variable and its lagged values is called as auto-correlation. In panel data this seems often to be the case that the data is autocorrelated because panel data distribution comprises of data of repeated observation across time on the similar cross-section (Wooldridge, 2002). Therefore, an autocorrelation test (Wooldridge, 2002) has been conducted on the data in order to determine the presence of autocorrelation in the data or otherwise. Table 4.5.1 presents the result for the test for autocorrelation of the data.

Table 4.5.1

Wooldridge test for Autocorrelation in Panel Data

Wooldridge test for autocorrelation in panel data	
H0: no first order autocorrelation:	
F(1, 104)	47.858***

Note: ***, and ** indicate significance at 1% and 5% respectively.

The said test analyses data under the null hypothesis of no first order auto-correlation in the data set. The p-value of the test result shows that we cannot accept the null hypothesis of absence of first order autocorrelation in the data. Hence, the data set used in this study is autocorrelated.

As the data is both heteroskedastic and autocorrelated, therefore, conventional Eiker-Huber-White robust standard errors are not feasible as they do not account for correlation among the observation, as is the case in this data set. Using Eiker-Huber-White robust standard errors in such case could violate the regression model assumptions (Hoechle, 2007) and will give inconsistent variance-covariance estimates (Baum, 2006). In the light of the nature of data being heteroskedastic and existence of auto-correlation among the observations, following Rogers (1993) a modified form of Eiker-Huber-White robust standard errors has been used in this investigation called clustered Eiker-Huber-White robust standard errors or simply clustered sandwich estimator. As per Rogers (1993) "cluster sandwich estimator allows for intragroup correlation, relaxing the usual requirement that the observations be independent i.e. the observations are independent across groups (clusters) but not necessarily within groups". Clustered sandwich estimator provides correct standard error estimates in the presence of heteroskedasticity and auto-correlation in the data (Rogers, 1993).

4.6 PANEL UNIT ROOT

Before performing any sort of statistical analysis, it is very important to check the panel distribution for presence of unit roots in the data otherwise the estimation results will be spurious. In order to check the stationarity of the data two tests have been performed on the data i.e. Harris and Tzavalis (1999) and Levin, Lin, and Chu (2002). The results of these tests are presented in

table 4.6.1 and 4.6.2 respectively. The data is examined for existence of unit root at the level. Both Levin, Lin, and Chu (2002) and Harris and Tzavalis (1999) unit root tests examine the data against the null hypothesis of existence of unit root in the data. The results of Harris and Tzavalis (1999) show that z-score and p-values of all the variables are within the parameters, therefore, we reject the null hypothesis that there exists unit root in the data and accept alternate hypothesis of absence of unit root in the data. Similarly, the results of Levin, Lin, and Chu (2002) indicate that the p-values are within the acceptable range i.e. equal to or lower than 0.05, hence it can be concluded that the variables are stationary at level. As the results of both the panel data unit root tests show that the variables are stationary at level accordingly we accept that the data is stationary at level and proceed with further analysis without any adjustment in the data.

Table 4.6.1

Harris-Tzavalis Unit Root Test for Panel Data

Harris-Tzavalis unit-root test for Panel data

Ho: Panels contain unit roots
Ha: Panels are stationary

Number of panels = 104
Number of periods = 10

AR parameter: Common
Panel means: Included
Time trend: Not included

Asymptotics: N -> Infinity
T -> Fixed

Variable		Statistic	z	p-value
FV	rho	0.6265	-3.7299	0.0001
TP	rho	0.0505	-25.0372	0.0000
lnTA	rho	0.4415	-10.5734	0.0000
LEV	rho	0.0880	-23.6515	0.0000
EM	rho	-0.2055	-34.5105	0.0000
CGScr	rho	0.5822	-5.3655	0.0000
CGScrXTP	rho	0.0437	-25.2882	0.0000
MgtOwnShp	rho	0.6038	-4.5664	0.0000
Top20	rho	0.4398	-10.6365	0.0000
INDBd	rho	0.6068	-4.4569	0.0000
INDAC	rho	0.4680	-9.5919	0.0059
MgtOwnXTP	rho	0.0813	-23.8978	0.0000
T20XTP	rho	0.0437	-25.2899	0.0000
INDBdXTP	rho	0.0509	-25.023	0.0000
INDACXTP	rho	0.1147	-22.6627	0.0000

Table 4.6.2

Levin-Lin-Chu Unit Root Test for Panel Data

Levin-Lin-Chu unit-root test for Panel data

Ho: Panels contain unit roots
Ha: Panels are stationary

Number of panels = 104
Number of periods = 10

AR parameter: Common
Panel means: Included
Time trend: Not included

Asymptotics: N/T > 0

ADF regressions: 1 lag
LR variance: Bartlett kernel, 6.00 lags average (chosen by LLC)

Variable		Statistic	p-value
FV	Unadjusted t	-35.79	
	Adjusted t*	-28.85	0.0000
TP	Unadjusted t	-29.66	
	Adjusted t*	-15.33	0.0000
lnTA	Unadjusted t	-12.60	
	Adjusted t*	-7.71	0.0000
LEV	Unadjusted t	-14.27	
	Adjusted t*	-6.70	0.0040
EM	Unadjusted t	-29.86	
	Adjusted t*	-16.65	0.0000
CGScr	Unadjusted t	-14.45	
	Adjusted t*	-3.62	0.0001
CGScrXTP	Unadjusted t	-28.84	
	Adjusted t*	-13.75	0.0000
MgtOwnShp	Unadjusted t	-2200.00	
	Adjusted t*	-2400.00	0.0000
Top20	Unadjusted t	-300000.00	
	Adjusted t*	-330000.00	0.0000
INDBd	Unadjusted t	-41.32	
	Adjusted t*	-38.41	0.0000
INDAC	Unadjusted t	-17.29	
	Adjusted t*	-7.67	0.0000
MgtOwnXTP	Unadjusted t	-1000.00	
	Adjusted t*	-1100.00	0.0000
T20XTP	Unadjusted t	-29.49	
	Adjusted t*	-14.74	0.0000
INDBdXTP	Unadjusted t	-26.53	
	Adjusted t*	-9.04	0.0000
INDACXTP	Unadjusted t	-29.35	
	Adjusted t*	-22.85	0.0000

4.7 MULTIVARIATE ANALYSIS

The results from estimation of the model for testing the relationship between firm value and tax planning are presented in the table 4.7.1 to 4.7.5. The results are based upon the reduced sample of 104 firms-year-ends after eliminating the outliers and influential observations from the complete sample comprising of 117 companies. The models have been estimated using both fixed and random effect model, however results of only one of them are explained as specified by the Hausman specification test.

Table 4.7.1 presents the results of estimation of Model-I as discussed in the previous section. The table shows test results for both fixed effect and random effect model. The Hausman specification test results shows that fixed effect model is preferable than random effect model, accordingly results of only fixed effects model are explained below.

The results of fixed effect model show that the overall model is significant at value for F-stat of 4.80 (at 1% significance level), while the overall R-squared value of 4.5%. The result indicates that there is a positive relation between tax planning and firm value. The coefficient against tax planning is 0.3821 and it is significant at 1% significance level. This indicates that for a one standard deviation increase in tax planning or book tax gap there is 0.3821 standard deviation increase in the firm value. This positive relationship between tax planning and firm value confirms the H_1, which postulates that there is relationship between tax planning and firm value.

Contrary to the advocates that tax planning may be valued negatively by the market due to increase in firm risk and agency problems (Goh, Lee, Lim, and Shevlin (2013); Blouin, 2014; Drake et al., 2017; Lietz, 2013; Desai and Dharmapala, 2009; Hanlon Slemrod, 2009; Wahab and Holland,

2013), this study finds a positive significant relationship between tax planning and firm value. The results indicate that tax planning is a value enhancing activity as posited by the traditionalist perspective of tax planning and that market participants view tax planning as value enhancing activity (Freeman, 1999; Tiras and Wheatley, 1998). Recently, Blaylock (2016), while empirically testing the impact of tax planning on firm performance, also finds evidence of positive relation between the tax planning or tax avoidance and firm value. In his study, he concludes that tax planning is a value enhancing activity. Further, our results also are in accordance with Wang (2010) who in his study also found evidence of positive influence of tax avoidance on the value of firm.

Table 4.7.1

Estimation of Model-I

	Fixed Effects Model			Random Effects Model		
FV	Coef.	Robust Std. Err.	t	Coef.	Robust Std. Err.	z
TP	0.3821***	0.1535	2.49	0.3525**	0.1908	1.85
lnTA	-0.2125***	0.0627	-3.39	-0.0585**	.0316025	-1.85
LEV	-0.2909	0.2095	-1.39	-0.3179	0.2034	-1.56
EM	0.0255	0.0230	1.11	0.0204	0.0261	0.78
cons	5.4186***	1.4293	3.79	1.9421***	0.7277	2.67
N	1040					
R2	0.0457			0.0274		
F	4.80***					
Wald chi2				9.01**		
Hausman						
	chi2	50.97***				

Note: ***, and ** indicate significance at 1% and 5% respectively.

Model-II of this study examines the influence of the corporate governance on the relationship between tax planning and firm value by inclusion of corporate governance variable in Model-I. The corporate governance of the firm has been measured using corporate governance index used by Shah and Butt (2009). The results are reported in Table 4.7.2 based on the reduced sample of 104 firm-year-ends after removing outliers and influential observations from the original sample. The Table 4.7.2 shows results for both fixed and random effects model. However, the result for fixed effects model are explained only as Hausman specification test, as shown in the table, determines that fixed effect model is preferable to random effect model.

As shown in the Table 4.7.2, the fixed effect model is generally significant with value of F-stat of 4.78 with 1% significance level pointing out the validity of results of the estimation. The R-squared for the model is 4.60%. The results of the fixed effect model indicate a positive relation between tax planning and firm value with a coefficient of 0.3788 (t-stat 2.48 at 5% significance level) indicating that tax planning is a value enhancing activity. As shown in the table the fixed effect estimator estimates a non-significant relation between corporate governance and firm value. Similar results were found by Shah and Butt (2009) and Azeem, Kouser, Hassan, and Saba, (2015) while investigating role of corporate governance in firms in Pakistan. This may be due to the reason that Pakistan is a developing country and that corporate governance structure are not fully mature and they are not function properly.

Comparing the results with the previous model it can be observed that there is a consistent positive relation between tax planning and firm value. Moreover, the magnitude of the effect of tax planning on the firm value has slightly changed after the inclusion of the corporate governance variable. This indicates that corporate governance has an impact on the relationship between tax

planning and firm value. However, as the coefficient of corporate governance is not significant, accordingly, it can be observed that strong evidence of impact of corporate governance practices on the relationship between tax planning and firm value could not be found.

Table 4.7.2

Estimation of Model-II:

	Fixed Effects Model			Random Effects Model		
FV	Coef.	Robust Std. Err.	t	Coef.	Robust Std. Err.	z
TP	0.3788**	0.1529	2.48	0.3564	0.185	1.88
lnTA	-0.2125***	0.0624	-3.40	-0.0589	0.0310	-1.90
LEV	-0.2933	0.2125	-1.38	-0.3163	0.2041	-1.90
EM	0.0253	0.0232	1.09	0.0207	0.0363	0.79
CGScr	-0.0131	0.0367	-0.36	0.0135	0.0284	0.47
cons	5.4718***	1.5258	3.59	1.8965***	0.7370	2.57
N	1040			1040		
R2	0.0460			0.0264		
F	4.78***					
Wald chi2				9.57		
Hausman						
	chi2	54.46***				

Note: *** and ** indicate significance at 1% and 5% respectively.

To further analyze the moderating role of corporate governance on the relationship between tax planning and firm value, as professed by Desai and Dharmapala (2009) and Annuar, Salihu, and Obid (2014), as discussed in the previous section, an interaction term of Corporate Governance Index and Tax Planning variable has been introduced in the Model-III. Results of Model-III are presented in the Table 4.7.3. The results are based upon the reduced sample of 104 firm-year-end after removal of outliers and influencers. Table 4.7.3 presents the results of the fixed and random effects estimator applied on Model-III. Only fixed effect model is explained in the following paras as the Hausman specification test shows that the fixed effect estimator is preferable.

The fixed effects model is generally significant with F-stat value of 4.31 (at 1% significance level). The overall R-square is 4.62%. In fixed effect model the coefficient in respect of tax planning has turned negative i.e. -0.0191 after the inclusion of interaction term of tax planning and corporate governance index. However, these results are not statistically different than zero as the coefficient is not significant. The coefficient of corporate governance variable is -0.0132, however, this coefficient is statistically insignificant as the p-value is higher than the 0.05. Further, coefficient for interaction term of tax planning and corporate governance index is 0.0969 in the fixed effect model, however, this result is also statistically not different than zero as the coefficient is not statistically significant. Hence the results show that the coefficients of tax planning, corporate governance and interaction term of tax planning and corporate governance index are statistically insignificant. The sign with respect to the coefficient of tax planning has turned negative in Model-III after the inclusion of interaction term, even though the coefficient is insignificant. This can be explained as the effect of inclusion of interaction term. As the interaction term was included assuming that better corporate governance will result in stronger positive impact of tax planning on the firm value. It can be concluded from the result that the positive influence of tax planning

has accumulated in the coefficient of interaction term turning the sign of the coefficient tax planning variable into negative (Kennedy, 2003).

Results of Model-III as presented in Table 4.7.3. indicate that after the inclusion of interaction term, of corporate governance and tax planning, the earlier significant direct relationship between firm value and tax planning does not hold true any longer, as the coefficients for tax planning becomes insignificant. This indicates that there is some impact of firm's corporate governance on the relation between tax planning and firm value, however, it is hard to understand the nature of role of corporate governance on the relation between tax planning and firm value due lack of a significant coefficient associated with the moderating variable (Wahab and Holland, 2012). Therefore, results fail to support the argument that corporate governance structure plays a controlling role in the relation between tax planning and value of the firm (Desai and Dharmapala, 2009; Annuar et al., 2014; Lestari and Wardhani, 2015). Similar results were found by Wahab and Holland (2012) in their study who also concluded that corporate governance does not moderates the relation between tax planning and firm value. In their study they found no evidence that corporate governance moderate that relationship between tax planning and firm value. The value of R-square also does not change between Model-I, Model-II and Model-III indicating that corporate governance does not bring much information into the initial model.

Table 4.7.3

Estimation of Model-III:

	Fixed Effects Model			Random Effects Model		
FV	Coef.	Robust Std. Err.	t	Coef.	Robust Std. Err.	z
TP	-0.0191	0.5536	-0.03	0.3180	0.6425	0.50
lnTA	-0.2154***	0.0629	-3.42	-0.0597	0.0311	-1.92
LEV	-0.2920	0.2115	-1.38	-0.3156	0.2023	-1.56
EM	0.0252	0.0231	1.09	0.0207	0.0263	0.79
CGScr	-0.0132	0.0367	-0.35	0.0133	0.0285	0.47
CGScrXTP	0.0969	0.1400	0.69	0.0092	0.1695	0.05
cons	5.5380***	1.5383	3.60	1.9152	0.7399	2.59
N	1040			1040		
R2	0.0462					
F	4.31***					
Wald chi2				12.84**		
Hausman						
	chi2	53.55***				

Note: ***, and ** indicate significance at 1% and 5% respectively.

The impact of corporate governance on the relationship of tax planning and firm value has been further analyzed after replacing the corporate governance index with its constituent proxies in

order to examine the impact of each item separately. Following models are obtained after replacing corporate governance index with its constituent proxies: -

Model - IV

$$FV_{(it)} = \alpha + \beta(TP_{(it)}) + \beta(MgtOwnShp_{(it)}) + \beta(Top20_{(it)}) + \beta(INDBd_{(it)}) + \beta(INDAC_{(it)}) + \beta(EM_{(it)}) + \beta(LEV_{(it)}) + \beta(Size_{(it)}) + \xi_{(it)}$$

Where *MgtOwnShp* represents management ownership or percentage of shares held by directors, *Top20* indicates ownership concentration or percentage of shares held by Top20 shareholders, *INDBd* represents percentage of independent directors in board and *INDAC* stands for percentage of independent directors in audit committee.

Model - V

$$FV_{(it)} = \alpha + \beta(TP_{(it)}) + \beta(MgtOwnshp_{(it)}) + \beta(Top20_{(it)}) + \beta(INDBd_{(it)}) + \beta(INDAC_{(it)}) + \beta(MgtOwnshp\ x\ TP_{(it)}) + \beta(Top20\ x\ TP_{(it)}) + \beta(INDBd\ x\ TP_{(it)}) + \beta(INDAC\ x\ TP_{(it)}) + \beta(EM_{(it)}) + \beta(LEV_{(it)}) + \beta(Size_{(it)}) + \xi_{(it)}$$

Where, *MgtOwnshp x TP* stands for interaction term between managerial ownership and tax planning, *Top20 x TP* stands for interaction term between ownership concentration and tax planning, *INDBd x TP* represents interaction term between percentage of independent board members and tax planning and *INDAC x TP* stands for interaction term between tax planning and percentage of independent audit committee members.

Table 4.7.4 presents the estimation results of Model-IV. The coefficient of Hausman test is significant at 1% significance with a value of 93.74, indicating that the model is a fixed effect model. Overall, the fixed effect model is significant with the value of F-stat equal to 4.80 at 1% significance level, while the value of R-square equals 4.57%.

The results as shown at Table 4.7.4 are consistent with the results of previous models. There is a persistent positive relation between tax planning and firm value. The coefficient in respect of tax planning has increased slightly to 0.4753 (at 1% significance level) in fixed effect model. This means that as per fixed effects model one standard deviation increase in tax planning leads to 0.4753 standard deviation increase in firm value. The proxies of corporate governance also provide some additional information. The results of fixed effects model also predict a positive significant relationship between percentage of independent directors in the audit committee and firm value with b-value of 0.6993 (at 1% significance level), similar results were found by Inam and Mukhtar (2014) while investigating the role of independent directors in Pakistani companies. The results show absence of any statistically significant impact of remaining corporate governance variable. According to the results of this investigation Management Ownership, Ownership Concentration does not affect firm value. Similar results were found by Ullah, Ali, and Mehmood (2017) while investigating ownership structure and its impact of firm value of Pakistani firms. On the other hand Percentage of Independent Director in Board, according to the results, does not affect firm value (Yasser, 2011) this may due to the reason that most of the independent appointees on the board are political, they have little influence over the board and lack of real independence (Coulson and Thomas, 1993) . These results suggest that the inclusion of corporate governance improves the relationship between tax planning and firm value. However, the increase in the coefficient of tax

planning is still not economically significant to firmly support the argument the corporate governance strengthens the relationship between tax planning and firm value.

Table 4.7.4

Estimation of Model-IV (Individual proxies of Corporate Governance):

	Fixed Effects Model			Random Effects Model		
FV	Coef.	Robust Std. Err.	t	Coef.	Robust Std. Err.	z
TP	0.4753***	0.1713	2.77	0.4313**	0.2019	2.14
lnTA	-0.2976***	0.0713	-4.17	-0.10558***	0.0394	-2.67
LEV	-0.2182	0.1634	-1.34	-0.2341	0.1605	-1.46
EM	0.0399	0.2107	1.89	0.0324	0.0235	1.38
MgtOwnShp	-0.1117	0.2200	0.51	-0.3991**	0.1774	-2.25
Top20	0.678	0.4387	1.55	0.5231	0.3339	1.57
INDBd	-0.0709	0.1317	-0.54	-0.0244	0.1167	-0.21
INDAC	0.6993***	0.2186	3.20	0.5488**	0.2263	2.42
cons	6.7398***	1.4051	4.80	2.5885***	0.7652	3.38
N	1040			1040		
R2	0.0457			0.1075		
F	4.80***					
Wald chi2				5.36***		
Hausman						
	chi2		93.74***			

Note: ***, and ** indicate significance at 1% and 5% respectively.

In order to further evaluate the moderating role of corporate governance on the relationship between tax planning and firm value, Model-V has been re-estimated by replacing corporate governance index by its constituent proxies used in the Model-III and their interaction terms. Table 4.7.5 presents the results of the estimation of Model-V.

The Table 4.7.5 presents the estimation results of Model – V. The results of Hausman specification test, as shown in the table, determines that fixed effect model is preferable to random effect model. As shown in the Table 4.7.5, the fixed effect model is generally significant with value of F-stat of 4.31 at 1% significance level pointing out the validity of results of the estimation. The R-squared for the model is 11.90%.

Consistent with the results previously estimated, the coefficient of tax planning has become statistically insignificant as the p-value of the coefficient concerned is greater the 0.05, in fixed effects model, indicating the positive relationship between tax planning does not hold true any longer while the coefficients of all of the interaction terms are also non-significant. The absence of any statistically significant coefficient on the tax planning variable and any of the interaction terms indicate that, except interaction term of tax planning and independent audit committee members, that corporate governance of the firm does not moderate the relation between firm value and tax planning.

Table 4.7.5

Estimation of Model-V (Individual proxies of Corporate Governance):

	Fixed Effects Model			Random Effects Model		
FV	Coef.	Robust Std. Err.	t	Coef.	Robust Std. Err.	z
TP	1.4739	0.8444	1.75	1.6692	0.8235	2.03
lnTA	-0.313***	0.071	-4.41	-0.1071***	0.0394	-2.72
LEV	-0.2084	0.1591	-1.31	-0.2245	0.1557	-1.44
EM	0.0308	0.0215	1.43	0.0236	0.0241	0.98
MgtOwnshp	-0.0921	0.2253	-0.41	-0.3910**	0.1801	-2.17
Top20	0.6864	0.4325	1.59	0.5290	0.3250	1.63
INDBd	-0.0735	0.1324	-0.56	-0.0205	0.1177	-0.17
INDAC	0.6889***	0.2164	3.18	0.5310	0.2246	2.36
MgtOwnshpXTP	-1.3508	0.9508	-1.42	-1.3528	0.9705	-1.39
Top20XTP	-0.7405	1.1499	-0.64	-0.8537	1.1392	-0.75
INDBdXTP	-0.3218	0.802	-0.4	-0.8967	0.9275	-0.97
INDACXTP	4.3212	1.8192	0.38	3.6338	1.7644	1.06
cons	7.0778	1.4026	5.05	2.6161	0.7738	3.38
N	1040			1040		
R2	0.1190					
F	4.31***					
Wald chi2				28.69***		
Hausman chi2			113.23***			

Note: ***, and ** indicate significance at 1% and 5% respectively.

4.8 SENSITIVITY ANALYSIS:

The aforementioned results have also been re-confirmed by replacing the proxy of tax planning i.e. book-tax gap with GAAP-ETR. Following Hanlon and Heitzman (2010) GAAP-ETR is calculated as ratio of current year tax expense and profit before tax. The results of the three models i.e. Model-I, Model-II and Model-III after the inclusion of the GAAP-ETR in place of book-tax gap as proxy of tax planning are consistent the afore-discussed results. The results of Model-I of sensitivity analysis, after introducing GAAP-ETR as proxy for tax planning, suggest a positive significant relation between tax planning and firm value. Model-II and Model-III further investigates the moderating role of corporate governance on the relation between tax planning and firm value. The results Model-II indicates the consistent positive relation between the tax planning and firm value variables, however, the inclusion of corporate governance does not impact the relation as the magnitude of the coefficient of GAAP-ETR is in principle the same as that in Model-I. The results of Model-III indicate that the positive relationship between tax planning and the value of firm does not hold any longer. Further lack any significant coefficient on the tax planning variable and interaction term fails to establish the presence of strong moderating role of corporate governance. These results are similar to the finding of Wahab and Holland, (2012) who also found no evidence of moderation. Further the value of R-square also does not significantly change between Model-I, Model-II and Model-III indicating that corporate governance does not bring much information into the initial model. The tabulated results of sensitivity analysis are presented in table 4.8.1, 4.8.2, and 4.8.3.

Table 4.8.1

Sensitivity Analysis – Model-I

	Fixed Effects Model			Random Effects Model		
FV	Coef.	Robust Std. Err.	t	Coef.	Robust Std. Err.	z
GAAPETR	0.0039**	0.0019	1.99	0.0033	0.0020	1.59
lnTA	-0.0834	0.0458	-1.83	-0.0049	0.0254	-0.19
LEV	-0.2911	0.2148	-1.36	-0.3345	0.2149	-1.56
EM	0.0058	0.0290	0.21	0.0212	0.0273	0.78
cons	2.5083	1.0363	2.42	0.7328	0.5590	1.31
N	1040					
R2	0.0136			0.0321		
F	2.3**					
Wald chi2				6.92		
Hausman						
	chi2	19.69***				

Note: ***, and ** indicate significance at 1% and 5% respectively.

Table 4.8.2

Sensitivity Analysis – Model-II

	Fixed Effects Model			Random Effects Model		
FV	Coef.	Robust Std. Err.	t	Coef.	Robust Std. Err.	z
GAAPETR	0.0039**	0.0019	1.98	0.0031	0.0020	1.59
lnTA	-0.0837	0.0453	-1.85	-0.0051	0.0259	-0.20
LEV	-0.2933	0.2173	-1.35	-0.3343	0.2159	-1.55
EM	0.0055	0.0282	0.20	0.0214	0.0273	0.78
CGScr	-0.0139	0.0362	-0.38	0.00726	0.0297	0.24
cons	2.55**	1.0807	2.37	0.7068	0.5560	1.27
N	1040			1040		
R2	0.0139			0.0363		
F	2.85**					
Wald chi2				7.1		
Hausman						
	chi2	22.93***				

Note: ***, and ** indicate significance at 1% and 5% respectively.

Table 4.8.3

Sensitivity Analysis – Model-III

	Fixed Effects Model			Random Effects Model		
FV	Coef.	Robust Std. Err.	t	Coef.	Robust Std. Err.	z
GAAPETR	-0.0031	0.0246	-0.13	-0.0062	0.0276	-0.23
lnTA	-0.0838	0.0453	-1.85	-0.0056	0.0258	-0.22
LEV	-0.2936	0.2173	-1.35	-0.3342	0.2158	-1.55
EM	0.0056	0.0283	0.20	0.0214	0.0273	0.78
CGScr	-0.0143	0.0359	-0.40	0.0065	0.0296	0.22
CGScrXGAAPETR	0.0019	0.0072	0.27	0.0026	0.0080	0.33
cons	2.5625**	1.0806	2.37	0.7211	0.5544	1.30
N	1040			1040		
R2	0.014			0.0359		
F	2.08					
Wald chi2				8.69		
Hausman						
	chi2	22.36***				

Note: ***, and ** indicate significance at 1% and 5% respectively.

CHAPTER 5

5 CONCLUSION, LIMITATIONS AND FUTURE RESEARCH:

5.1 CONCLUSION:

This study has been conducted in order to investigate the relationship between tax planning and firm value while evaluating the moderating effect of corporate governance. The results of the investigation confirm the hypothesis of significant relationship between tax planning and firm value. However, the empirical evidence does not support the argument that corporate governance plays a moderating role. The following lines summarize the afore discussed chapters, detail the limitation of the study and briefly concludes the study.

The literature review details the extant literature on the relationship between the tax avoidance and its impact on firm value. There are two contrasting views in this respect i.e. traditionalist view and stakeholder or agency framework of tax planning. According to the traditional view, tax avoidance is a value enhancing activity and any tax saving is considered as direct increase in the shareholders' wealth. On the other hand, stakeholder of agency view point argues that tax planning does not necessarily means increase in shareholders (Desai and Dharmapala, 2009; Wahab and Holland, 2012). It posits that tax planning results in increase in firm risk and accordingly market participants may, therefore, discount the value of firm for assuming the additional risk in the result of tax planning (Guenther, Matsunaga, and Williams, 2013; Blouin, 2014; Drake et al., 2017). Further, tax planning gives rise to agency problems and creates financial opacity which encourages rent extraction by management, therefore, tax planning does not necessarily mean direct increase in shareholders' value (Desai and Dharmapala, 2006; Annuar et al., 2014) . On the other hand, tax

planning may also result in penalties, socio-political implications, loss of goodwill, business loss and public outcry. All these have negative implication on the perception of the market regarding firm's involvement in tax planning activity and the market may respond by discounting the value of stock of the tax aggressive firm (Lietz, 2013).

Moreover, corporate governance plays a key role in restricting the rent extraction by firm's management and is expected to play the role of moderator for increasing shareholders' wealth in a high tax avoidance environment (Desai and Dharmapala, 2009; Annuar et al., 2014; Wahab and Holland, 2012; Lestari and Wardhani, 2015). Accordingly, in the light of the literature review, two hypotheses are formed in this investigation. The first hypothesis proposes a relationship between tax planning and firm value, while the second hypothesis describes a moderating role of corporate governance on the relationship between tax planning and firm value. Keeping in view that, there two opposing views in theory regarding the effect of tax avoidance on the valuation of firm, conflicting results from the empirical evidence in the extant literature and lack of any previous studies in this regard in Pakistan, the hypotheses of this study are proposed without any predicted direction.

In the first stage, multivariate analysis is conducted in order to estimate the relationship of tax planning and firm value. Then in second stage, moderating role of corporate governance is investigated on the above relationship. In contrary to stakeholder and agency theory (Blouin, 2014; Drake et al., 2017; Desai and Dharmapala, 2009) the results estimate a positive significant relation between tax planning and firm value. The results of the study are in accordance with the traditional perspective of tax planning that considers tax planning a value enhancing activity (Cloyd, Mills, and Weaver, 2003; Freeman, 1999; Tiras and Wheatley, 1998). The results are also in line with the contemporary research in the area of tax avoidance by Blaylock (2016), Wang (2010) and

Wilson, (2009) who also in their investigations found that tax planning or avoidance enhances the value of firm.

In the second stage, moderating effect of corporate governance is evaluated using both a corporate governance index and its constituent proxies independently. In general, the results do not support the idea that corporate governance mechanism acts as a watchdog during tax planning and that it strengthens the positive effect of tax planning and firm value. Specifically, lack of significant coefficients in respect of any of the interactive term of corporate governance and tax planning confirms that corporate governance is not a controlling factor in the relationship between tax planning and firm value. Similar results were also found by Wahab and Holland (2012) in their investigation while evaluating moderating role of corporate governance with respect of tax avoidance. They failed to find any evidence regarding importance of corporate governance as a moderating factor between tax avoidance and firm value as professed by the stakeholder - agency framework with respect to tax avoidance (Wahab and Holland, 2012). The results of the study complement contemporary research (Armstrong, Blouin, Jagolinzer, and Larcker, 2015; Seidman and Stomberg, 2013) regarding general applicability of stakeholder-agency view of tax avoidance. Results of the models with the corporate governance index and most of its constituent proxies fails to provide any significant evidence that corporate governance of firms effects the valuation of tax planning activities of the firm. Hence, it can be concluded that corporate governance mechanism does not moderates the relationship between tax planning and firm value.

In short, this study aims to contribute to the extant literature on value implication of tax planning or avoidance. This study investigates the relationship between tax planning and firm value while simultaneously considering corporate governance as a moderator. The results indicate that there is a positive relation between tax planning and firm value. These results are in line with the traditional

view of tax planning which believes that tax planning is value enhancing in contrast the agency perspective of tax planning. The results also indicate absence of any substantial evidence regarding moderating role of corporate governance of firm on the relation between tax planning and firm value.

5.2 LIMITATIONS AND FUTURE RESEARCH:

Following lines discuss the limitations of the study and also highlight the suggestions for future research. The limitation of the study generally relates to the data collection and methodological aspects of the study.

The sample framework of the study comprises of non-financial companies listed at Pakistan Stock Exchange (PSX). Accordingly, the results of this study may not be generalizable in case of other type of companies e.g. insurance companies, financial institutes and banks etc. The data has been gathered manually mostly from the financial statements of the companies by the author himself. The data is collected with utmost care and the data has been double-checked, still the possibility of human error cannot be ignored in such a large data set.

Even with the aforementioned limitations, the results of the investigation highlight venues for future research in the area of tax planning or avoidance. The contrasting results in the recent empirical research conducted in different countries gives rise to a possibility that these contrasting results may be due to difference of rules and regulations among countries. Accordingly, future research can be conducted on the relation of rules and regulations in various countries and their impact on the valuation of tax planning. Further, this study uses one proxy of tax planning i.e. book-tax-gap as a measure of tax planning. Future research can use other more sophisticated

proxies, namely Cash ETR, Long Run Cash ETR, ETR Differential, Tax Shelter Activity, and Marginal Tax Rate (Hanlon and Heitzman, 2010) to capture other dimensions of the tax avoidance not observed in this study due to the limitation of book-tax-gap proxy in order to further evaluate the relative valuation implications. Finally, this study spans from 2006 to 2015, however, after the publication of Panama Papers the issue of the tax avoidance has become sensitive and governments from all over the world have taken steps to curtail it via new legislations, strict audits and heavier penalties. Further, the Panama Papers has also resulted in increased awareness about the tax avoidance and heightened sensitivity among the masses. These developments have increased pressure upon tax avoiding firms and have made it riskier. Accordingly, future research can be conducted on value implication of tax planning on pre and post Panama Papers to evaluate any change in behavior towards tax avoidance and it value implications.

REFERENCES:

Abdul Wahab, N. S., & Holland, K. (2012). Tax planning, corporate governance and equity value. *British Accounting Review*, *44*(2), 111–124. https://doi.org/10.1016/j.bar.2012.03.005

Ahmed, R. A., & Rider, M. (2008). *Pakistan Tax Policy Report Tapping Tax Bases for Development*.

Alford, A., Jones, J., Leftwich, R., & Zmijewski, M. (2013). The Relative Informativeness of Accounting Disclosures in Different Countries, *31*(1993), 183–223.

Ali, A., & Hwang, L.-S. (2000). Country-Specific Factors Related to Financial Reporting and the Value Relevance of Accounting Data. *Journal of Accounting Research*, *38*(1), 1. https://doi.org/10.2307/2672920

Andreoni, J., Erard, B., & Feinstein, J. (1998). Tax Compliance. *Journal of Economic Literature*, *36*(2), 818–860. Retrieved from http://www.jstor.org/stable/2565123

Annuar, H. A., Salihu, I. A., & Obid, S. N. S. (2014). Corporate Ownership, Governance and Tax Avoidance: An Interactive Effects. *Procedia - Social and Behavioral Sciences*, *164*(August), 150–160. https://doi.org/10.1016/j.sbspro.2014.11.063

Armstrong, C. S., Blouin, J. L., Jagolinzer, A. D., & Larcker, D. F. (2015). Corporate governance, incentives, and tax avoidance. *Journal of Accounting and Economics*, *60*(1), 1–17. https://doi.org/10.1016/j.jacceco.2015.02.003

Asquith, P., & Mullins Jr, D. W. (1986). Signalling with Dividends, Stock Repurchases, and Equity Issues. *Financial Management*, *15*(3), 27–44. Retrieved from http://www.lib.lsu.edu/apps/onoffcampus.php?url=http://search.ebscohost.com/login.aspx?direct=true&db=bth&AN=5030169&site=ehost-live&scope=site

Augier, M., & Teece, D. J. (2017). The Palgrave encyclopedia of strategic management. Retrieved from http://link.springer.com/referencework/10.1057/978-1-349-94848-2

Azeem, M., Kouser, R., Hassan, I. e, & Saba, I. (2015). Paradoxical Role of Corporate Governance in Firm Performance : New Evidence from Financial Crisis 2008, *35*(2), 519–531.

Badertscher, B. A., Katz, S. P., & Rego, S. O. (2013). The separation of ownership and control and corporate tax avoidance. *Journal of Accounting and Economics*, *56*(2–3), 228–250. https://doi.org/10.1016/j.jacceco.2013.08.005

Balakrishnan and Guay, B. (2012). Does Tax Aggressiveness Reduce Financial Reporting Transparency? *The Journal of the American Taxation Association*, *33*(2), 111–135. https://doi.org/http://dx.doi.org/10.2139/ssrn.1792783

Baum, C. F. (2006). *An introduction to modern econometrics using Stata* (1st ed.). Stata Press.

Bebchuk, L., Cohen, A., & Ferrell, A. (2009). What matters in corporate governance. *Review of Financial Studies*, *22*(2), 783–827. https://doi.org/10.1093/rfs/hhn099

Blaylock, B. S. (2016). Is Tax Avoidance Associated with Economically Significant Rent Extraction among U.S. Firms? *Contemporary Accounting Research*, *3*(33), 1013–1043. https://doi.org/10.1111/1911-3846.12174

Blouin, J. (2014). Defning and Measuring Tax Planning Aggressiveness. *National Tax Journal*, *67*(4), 875–900. https://doi.org/10.17310/ntj.2014.4.06

Bruce, D., Deskins, J., & Fox, W. F. (2007). On the Extent, Growth, and Efficiency Consequences of State Business Tax Planning. In A. J. Auerbach, J. R. J. Hines, & J. Slemrod (Eds.), *Taxing Corporate Income in the 21st Century* (pp. 226–256). Cambridge University Press. Retrieved from http://dx.doi.org/10.1017/CBO9780511510823.017

Chen, A., Kao, L., Tsao, M., & Wu, C. (2007). Building a corporate governance index from the perspectives of ownership and leadership for firms in Taiwan. *Corporate Governance*, *15*(2), 251–261. https://doi.org/10.1111/j.1467-8683.2007.00572.x

Chen, X., Hu, N., Wang, X., & Tang, X. (2013). Tax avoidance and firm value: evidence from China. *Nankai Business Review International*, *5*(1), 25–42. https://doi.org/10.1108/NBRI-10-2013-0037

Christensen, J., & Murphy, R. (2004). The Social Irresponsibility of Corporate Tax Avoidance: Taking CSR to the bottom line. *Development*, *47*(3), 37–44. https://doi.org/10.1057/palgrave.development.1100066

Cloyd, C. B., Mills, L. F., & Weaver, C. D. (2003). Firm Valuation Effects of the Expatriation of U.S. Corporations to Tax Haven Countries. *The Journal of the American Taxation Association*, *25*(s-1), 87–109. https://doi.org/10.2308/jata.2003.25.s-1.87

Coulson-Thomas, C. (1993). The Corporate Board: Confronting the Paradoxes. *Strategic Change*, *2*(3), 181–182. https://doi.org/10.1002/jsc.4240020313

David A. Belsley, Edwin Kuh, & Roy E. Welsch. (2004). *Regression Diagnostics — Identifying Influential Data and Sources of Collinearity*. Willey Interscience. Retrieved from http://eu.wiley.com/WileyCDA/WileyTitle/productCd-0471691178.html

Desai, M. A., & Dhammika, D. (1998). CORPORATE TAX AVOIDANCE AND FIRM VALUE. Retrieved from http://www.nber.org/papers/w11241

Desai, M. A., & Dharmapala, D. (2007). Corporate Tax Avoidance and Firm Value. *Available at SSRN: Http://Ssrn.Com/Abstract=689562 or Http://Dx.Doi.Org/10.2139/Ssrn.689562*, (MAY 2005). https://doi.org/10.1162/rest.91.3.537

Desai, M. A., & Dharmapala, D. (2009). Corporate Tax Avoidance and Firm Value. *The Review of Economics and Statistics*, *91*(3), 537–546. https://doi.org/10.1162/rest.91.3.537

Desai, M. A., Dyck, A., & Zingales, L. (2004). Corporate Governance and Taxation. *American Law & Economics Association Annual Meetings*, 1–56.

Deschenes, E. (1990). Longitudinal research designs. *Measurement Issues in Criminology*, 152–166.

Dharmapala, D., & Desai, M. A. (2006). Corporate tax avoidance and high-powered incentives.

Journal of Financial Economics, *79*(1), 145–179. https://doi.org/10.1016/j.jfineco.2005.02.002

DOWNES, D. H., & HEINKEL, R. (1982). Signaling and the Valuation of Unseasoned New Issues. *Journal of Finance*, *37*(1), 1–10. https://doi.org/10.2307/2327113

Drake, K. D., Lusch, S. J., & Stekelberg, J. (2017). Does Tax Risk Affect Investor Valuation of Tax Avoidance? *Journal of Accounting, Auditing & Finance*, 0148558X1769267. https://doi.org/10.1177/0148558X17692674

Fama, E. F. (1980). Agency Problems and the Theory of the Firm Agency Problems and the Theory of the Firm. *The Journal of Political Economy*, *88*(2), 288–307. https://doi.org/10.1086/260866

Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *Journal of Law and Economics*, *26*(2), 301–325.

Fox, J. (1991). *Regression Diagnostics. Sage* (Vol. 79). Sage Publications. https://doi.org/10.4135/9781412985604

Freeman, E. R., & Evan, W. M. (1979). A Stakeholder Theory of the Modern Corporation: Kantian Capitalism. *Ethical Theory and Business*. Retrieved from http://www.business.uzh.ch/professorships/strategy/stu/BS/lecture/Evan_Freeman_1988.pdf

Freeman, R. E. (1984). *Strategic management: A stakeholder approach. Pitman Series in Business and Public Policy* (Vol. 1). https://doi.org/10.2139/ssrn.263511

Freeman, R. N. (1999). Analysts' Interpretation and Investor's Valuation of Tax Carryforwards.'. *Contemporary Accounting Research*, *16*(1), 35–38. Retrieved from http://search.ebscohost.com/login.aspx?direct=true&db=buh&AN=2323985&site=ehost-live

Friedman, A. L., & Miles, S. (2006). *Stakeolders: Theory and Practice. Oxford University*. Retrieved from http://www.amazon.com/Stakeholders-Practice-Andrew-L-Friedman-ebook/dp/B005NKK5YS

Gillan, S., & Starks, L. T. (1998). A Survey of Shareholder Activism: Motivation and Empirical Evidence. *Contemporary Finance Digest*, *2*(3), 10–34. https://doi.org/10.2139/ssrn.663523

Goh, B. W., Lee, J., Lim, C. Y., & Shevlin, T. (2013). The effect of corporate tax avoidance on the cost of equity, 1–54. Retrieved from http://ink.library.smu.edu.sg/soa_research%5Cnhttp://ink.library.smu.edu.sg/soa_research/1087%5Cnhttp://ssrn.com/abstract=2237742

Gompers, P., Ishi, J., & Metrick, A. (2003). Corporate governance and equity prices. *The Quarterly Journal of Economics*, *118*(1), 107–155. https://doi.org/10.1162/00335530360535162

Greene, W. W. H. . (2012). *Econometric analysis. Prentice Hall* (Vol. 97). https://doi.org/10.1198/jasa.2002.s458

Guenther, D. A., Matsunaga, S. R., & Williams, B. M. (2017). Is tax avoidance related to firm

risk? *Accounting Review*, *92*(1), 115–136. https://doi.org/10.2308/accr-51408

Hair, J. F., Babin, B. J., & Anderson, R. E. (2006). *Multivariate Data Analysis* (6th ed.). Pearson. Retrieved from https://www.pearson.com/us/higher-education/product/Hair-Multivariate-Data-Analysis-6th-Edition/9780130329295.html

Hanlon, M., & Heitzman, S. (2010). A review of tax research. *Journal of Accounting and Economics*, *50*(2–3), 127–178. https://doi.org/10.1016/j.jacceco.2010.09.002

Hanlon, M., & Slemrod, J. (2009). What does tax aggressiveness signal? Evidence from stock price reactions to news about tax shelter involvement. *Journal of Public Economics*, *93*(1–2), 126–141. https://doi.org/10.1016/j.jpubeco.2008.09.004

Harris, R. D. F., & Tzavalis, E. (1999). Inference for unit roots in dynamic panels where the time dimension is fixed. *Journal of Econometrics*, *91*(2), 201–226. https://doi.org/10.1016/S0304-4076(98)00076-1

Hill, C., & Jones, T. (1992). Stakeholder - Agency theory. *Journal of Management Studies*. Retrieved from http://onlinelibrary.wiley.com/doi/10.1111/j.1467-6486.1992.tb00657.x/abstract

HMRC. (2014). Measuring tax gaps 2014 edition Tax gap estimates for 2012-13. *HM R Evenue & Custtoms*, (October).

Hoechle, D. (2007). Robust standard errors for panel regressions with cross-sectional dependence. *Stata Journal*, *7*(3), 281–312. https://doi.org/The Stata Journal

Hoi, C. K., Wu, Q., & Zhang, H. (2013). Is corporate social responsibility (CSR) associated with tax avoidance? Evidence from irresponsible CSR activities. *The Accounting Review*, *88*(6), 2025–2059. https://doi.org/10.2308/accr-50544

Inam, H., & Mukhtar, A. (2014). Corporate governance and its impact on performance of banking sector in Pakistan, *3*(2), 26–36.

Jacob, M., & Schuett, H. H. (2015). *Firm Valuation and the Uncertainty of Future Tax Avoidance*. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2347330

Kennedy, P. (2003). *A Guide to Gconometrics*. *ECONOMICS AND FINANCE* (Fifth Edit). MIT Press, One Rogers Street Cambridge MA 02142-1209. Retrieved from https://mitpress.mit.edu/books/guide-econometrics

Kessler, E. H., Bartunek, J. M., Hitt, M., Huff, A. S., Lawrence, P. R., Pfeffer, J., & Whetten, D. A. (2013). *Encyclopedia of Management Theory*.

Kim, J. B., Li, Y., & Zhang, L. (2011). Corporate tax avoidance and stock price crash risk: Firm-level analysis. *Journal of Financial Economics*, *100*(3), 639–662. https://doi.org/10.1016/j.jfineco.2010.07.007

Kirchler, E., & Kirchler, E. (2003). Everyday representations of tax avoidance, tax evasion, and tax flight: Do legal differences matter? *Journal of Economic Psychology*, *24*(187), 535–553. https://doi.org/10.1016/S0167-4870(02)00164-2

Koester, A. (2011). Investor Valuation of Tax Avoidance Through Uncertain Tax Positions.

SSRN Electronic Journal. https://doi.org/10.2139/ssrn.1905210

Lambert, R., Leuz, C., & Verrecchia, R. E. (2007). Accounting information, disclosure, and the cost of capital. *Journal of Accounting Research*, *45*(2), 385–420. https://doi.org/10.1111/j.1475-679X.2007.00238.x

Lanis, R., & Richardson, G. (2011). The effect of board of director composition on corporate tax aggressiveness. *Journal of Accounting and Public Policy*, *30*(1), 50–70. https://doi.org/10.1016/j.jaccpubpol.2010.09.003

Lanis, R., & Richardson, G. (2012). Corporate social responsibility and tax aggressiveness: a test of legitimacy theory. *Accounting, Auditing & Accountability Journal*, *26*(1), 75–100. https://doi.org/10.1108/09513571311285621

Lanis, R., & Richardson, G. (2013). Corporate social responsibility and tax aggressiveness: a test of legitimacy theory. *Accounting, Auditing & Accountability Journal*, *26*(1), 75–100. https://doi.org/10.1108/09513571311285621

Leedy, P. D., & Ormrod, J. E. (2005). *Practical Research: Planning and Design* (8th ed.). N.J: Upper Saddle River, N.J: Prentice Hall. Retrieved from https://www.pearson.com/us/higher-education/product/Leedy-Practical-Research-Planning-and-Design-7th-Edition/9780139603600.html

Lestari, N., & Wardhani, R. (2015). The effect of the tax planning to firm value with moderating board diversity. *International Journal of Economics and Financial Issues*, *5*(2010), 315–323. Retrieved from http://www.scopus.com/inward/record.url?eid=2-s2.0-84937868131&partnerID=tZOtx3y1

Levin, A., Lin, C. F., & Chu, C. S. J. (2002). Unit root tests in panel data: Asymptotic and finite-sample properties. *Journal of Econometrics*, *108*(1), 1–24. https://doi.org/10.1016/S0304-4076(01)00098-7

Levy, H., & Lazarovich-Porat, E. (1995). Signaling theory and risk perception: An experimental study. *Journal of Economics and Business*, *47*(1), 39–56. https://doi.org/10.1016/0148-6195(94)00022-6

Lietz, G. M. (2013). Determinants and Consequences of Corporate Tax Avoidance. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.2363868

Lindblom, C. K. (1994). The Implications of Organisational Legitimacy for Corporate Social Performance and Disclosure. In *Critical Perspectives on Accounting Conference*.

Marriage, M. (2014a). Aggressive tax avoidance troubles large investors. *Financial Times*, 5–8. Retrieved from http://www.ft.com/cms/s/0/e56ca00c601011e498e600144feabdc0.%5Cnhtml#axzz3ZTrFsx1k

Marriage, M. (2014b). Investor complacency over tax avoidance wanes. *Financial Times*, 6–9. Retrieved from https://www.ft.com/content/fe8e7fcc-6b2f-11e4-be68-00144feabdc0

McMillan, J. H., & Schumacher, S. (2001). *Research in Education : A Conceptual Introduction* (5th ed.). New York: Longman.

Minnick, K., & Noga, T. (2010). Do corporate governance characteristics influence tax management? *Journal of Corporate Finance*, *16*(5), 703–718. https://doi.org/10.1016/j.jcorpfin.2010.08.005

Murphy R. (2012). *Closing the European Tax Gap A report for Group of the Progressive Alliance of Socialists & Democrats in the European Parliament. Tax Research UK.*

Parahoo, K. (1997). *Nursing Research : Principles, Process and Issues* (2nd ed.). Basingstoke, Hampshire: Macmillan.

Parmar, B. L., Freeman, R. E., Harrison, J. S., Wicks, A. C., Purnell, L., & de Colle, S. (2010). Stakeholder Theory: The State of the Art. *The Academy of Management Annals*, *4*(1), 403–445. https://doi.org/10.1080/19416520.2010.495581

Payne, D. M., & Raiborn, C. A. (2018). Aggressive Tax Avoidance: A Conundrum for Stakeholders, Governments, and Morality. *Journal of Business Ethics*, *147*(3), 469–487. https://doi.org/10.1007/s10551-015-2978-5

Pettigrew, A. M. . (1990). Longitudinal Field Research on Change : Theory and Practice. *Organization Science*, *1*(3), 267–292.

Phillips, R. (2003). *Stakeholder Theory and Organizational Ethics.*

Plumley, A. (2012). *Overview of the Tax Year 2006 Tax Gap Estimates. IRS.*

Polit, D. F., & Beck, T. C. (2003). *Nursing Research: Generating and Assessing Evidence for Nursing Practice* (7th ed.). Philadelphia: Lippincott Williams and Wilkins.

Rego, S. O., & Wilson, R. (2012). Equity Risk Incentives and Corporate Tax Aggressiveness. *Journal of Accounting Research*, *50*(3), 775–810. https://doi.org/10.1111/j.1475-679X.2012.00438.x

Richardson, G., Taylor, G., & Lanis, R. (2013). The impact of board of director oversight characteristics on corporate tax aggressiveness: An empirical analysis. *Journal of Accounting and Public Policy*, *32*(3), 68–88. https://doi.org/10.1016/j.jaccpubpol.2013.02.004

Rogers, W. H. (1993). *Regression standard errors in clustered samples. Stata Technical Bulletin* (Vol. 13). https://doi.org/Reprinted in Stata Technical Bulletin Reprints; vol. 3; 88–94

Ross, S. A. (1977). The Determination of Financial Structure: The Incentive Signalling Approach. *Bell Journal of Economics*, *8*(1), 23–40. https://doi.org/10.2307/3003485

Schiopoiu Burlea, A., & Popa, I. (2013). Encyclopedia of Corporate Social Responsibility. In S. O. Idowu, N. Capaldi, L. Zu, & A. Das Gupta (Eds.) (pp. 1579–1584). Berlin, Heidelberg: Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-28036-8_471

Scholes, M. S., & Wolfson, M. A. (1992). *Taxes and business strategy : a planning approach.* Englewood Cliffs, N.J.: Prentice Hall.

Seidman, J. K., & Stomberg, B. (2013). Option Compensation and Tax Avoidance : Substitution Effect or Change in Behavior. *Working Paper, University of Texas.*

Shah, S. Z. A., & Butt, S. A. (2009). The impact of corporate governance on the cost of equity : Empirical evidence from Pakistani listed companies. *The Labore Journal of Economics*, *14*(1), 139–171.

Shleifer, A., & Vishny, R. W. (1997). A Survey of Corporate Governance. *The Journal of Finance*, *52*(2), 737–783. https://doi.org/10.1111/j.1540-6261.1997.tb04820.x

Simone, L. De, Mills, L. F., Stomberg, B., Ayers, B., Berger, P., Ebert, N., … Thornock, J. (2014). *What Does Income Mobility Reveal About the Tax Risk-Reward Tradeoff?* Austin. Retrieved from https://www.ntanet.org/wp-content/uploads/proceedings/2014/096-simone-mills-stomberg-measuring-income-mobility.pdf

Slemrod, J. (2004). The Economics of Corporate Tax Selfishness. *National Tax Journal*, *LVII*(4), 877–899. https://doi.org/10.1017/CBO9781107415324.004

Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics*, *87*(3), 355–374. https://doi.org/10.2307/1882010

Tiras, S. L., & Wheatley, C. M. (1998). the Valuation Implications of a Firm ' S Ability To Mitigate or Sustain the Effects of Tax Law Changes the Valuation Implications of a Firm ' S Ability To Mitigate or Sustain the Effects of Tax Law Changes. *Working Paper*, 33. Retrieved from https://ssrn.com/abstract=130899

Ullah, W., Ali, S., & Mehmood, S. (2017). Impact of Excess Control, Ownership Structure and Corporate Governance on Firm Performance of Diversified Group Firms in Pakistan. *Business & Economic Review*, *9*(2), 49–72. https://doi.org/10.22547/BER/9.2.3

Waddock, S. A., Bodwell, C., & Graves, S. B. (2002). Responsibility: The New Business Imperative. *The Academy of Management Executive (1993-2005)*, *16*(2), 132–148. Retrieved from http://www.jstor.org/stable/4165848

Wang, X. (2010). Tax Avoidance, Corporate Transparency, and Firm Value. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.1716474

Wilson, R. J. (2009). An Examination of Corporate Tax Shelter Participants The University of Iowa, *84*(3), 969–999. https://doi.org/10.2308/accr.2009.84.3.969

Wooldridge, J. M. (2002). *Econometric Analysis of Cross Section and Panel Data* (Vol. 58). Massachusetts: The MIT Press, Massachusetts. https://doi.org/10.1515/humr.2003.021

Yasser, Q. R. (2011). Corporate Governance and Performance : An Analysis of Pakistani Listed Firms. *Global Journal of Management and Business Resear*, *11*(10), 27–38.

Yorke, S. M., Amidu, M., & Agyemin-boateng, C. (2016). The effects of earnings management and corporate tax avoidance on firm value. *Int. J. Management Practice*, *9*(2), 112–131.

Zech, N. (2013). Stakeholder Relationship Management in the Context of Crisis Management. In *New Challenges of Economic and Business Development* (pp. 555–562).

Appendix-A

Sr.	Variable	Denoted by	Description	Formula
1	Firm Value	FV	The value of firm has been calculated as the ration of market value of equity and book value of equity.	$Firm\ Value_{(i,t)} = \frac{Market\ Value\ of\ Equity_{(i,t)}}{Book\ Value\ of\ Equity_{(i,t)}}$
2	Tax Planning	TP	Difference between financial income and income reported to tax authorities, scaled by total assets.	$TP_{(i,t)} = \frac{PBT_{(i,t)} - \frac{TE_{(i,t)}}{TR_{(i,t)}}}{TA_{(i,t)}}$
3	Firm Size	lnTA	Natural log of total Assets	ln (Total assets)
4	Leverage	LEV	Ratio of long term debt and total assets	Leverage = Long term debt ÷ Total assets
5	Earning Management	EM		$Earning\ management = [(Current\ Assets_{(t)} - Current\ Assets_{(t-1)}) + (Current\ Liabilities_{(t)} - Current\ Liabilities_{(t-1)}) + (Cash\ \&\ Short\ Term\ Investment_{(t)} - Cash\ \&\ Short\ Term\ Investment_{(t-1)}) + (debt\ in\ current\ liabilities_{(t)} - Debt\ in\ current\ liabilities_{(t-1)}) + (Depriciation\ \&\ Amortization_{(t)} - Depriciation\ \&\ Amortization_{(t-1)})] \div [Opening\ value\ of\ total\ assets_{(t)}]$
6	Corporate Governance Index	CGScr	See Appendix-B	
7	Ownership Structure	MgtQwnShp	Percentage of share held by Directors	
8	Ownership Concentration	Top20	Percentage of share held by Top20 shareholders	
9	Board Independence	INDBd	Number of Independent Non-Executive Directors divided by Total Number of Directors.	
10	Audit Committee Independence	INDAC	Number of Independent Non-Executive Directors divided by Total Number of Audit Committee Members	
11	GAAP ETR	GAAP ETR	Ratio of Current Year Tax Expense and Profit Before Tax	$GAAP\ ETR = \frac{Current\ Year\ Tax\ Expanse}{Current\ Year\ Profit\ Before\ Tax}$

Appendix-B

Scoring Criteria and their weights

Presence of INED's in Board and Audit Committee: Weight 55%

1. Number of INED's in Board:

Range	Score
0% -------- 20%	1
21% ------- 40%	2
41% ------- 60%	3
61% -------- 80%	4
81% -------- 100%	5

2. Number of INED's in Audit Committee:

Range	Score
0% -------- 20%	1
21% ------- 40%	2
41% ------- 60%	3
61% -------- 80%	4
81% -------- 100%	5

Ownership Composition: Weight 45%

1. Ownership Concentration i.e. Percentage of share held by Top20 shareholders:

Range	Score
0% --------- 20%	5
21% ------- 40%	4
41% ------- 60%	3
61% -------- 80%	2
81% -------- 100%	1

2. Percentage of share held by Directors:

Range	Score
0% --------- 20%	5
21% ------- 40%	4
41% ------- 60%	3
61% -------- 80%	2
81% -------- 100%	1