

IMPACT OF ORGANIZATIONAL CAPITAL, OWNERSHIP STRUCTURE, AND CAPITAL STRUCTURE ON FIRM VALUE WITH MODERATING ROLE OF AUDIT QUALITY AND TAX AVOIDANCE-EVIDENCE FROM PAKISTAN

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Abstract

The current study investigates the role of organizational capital, ownership structure, and capital structure on firm performance, measured by firm value (FV) and return on equity (ROE) of 130 non-financial companies listed on the Pakistan Stock Exchange for the period 2014-2024. It's guided by the resource-based perspective (RBV) and agency theory and explores how intangible resources and the governance mechanisms influence firm performance in the context of an emerging economy. Findings from the study use dynamic panel GMM estimation and show that both ownership structure and organizational capital have a positive performance effect on FV and ROE, while director ownership has a modest or negative performance effect, and leverage reduces performance. Firm size does contribute positively to performance.

Importantly, audit quality (AQ) strengthens the positive effect of organizational capital and ownership structure on both FV and ROE. The positive effect of AQ on firm value creation demonstrates the importance of high-quality audit in contributing to firm governance. Tax avoidance had a significant moderating effect on ROE, further suggesting that viable tax avoidance is a key factor of higher profitable firms, but the moderating effect of tax avoidance on FV (Tobin Q) had a modest effect.

The contributions of this study serve as the foundation for understanding that investments in intangible assets, effective governance mechanisms, and strategic financial practices all play an important role in enhancing firm performance in Pakistan. The contributions serve not just as an empirical study for theory testing, but also practical considerations in management, investing, and policy to improve value creation.

Keywords: Organisational Capital, Capital Structure, Ownership Structure, Firm value, Audit quality, Tax avoidance, System GMM, Pakistan.

1. INTRODUCTION

The aspiration towards firm value (FV) is fundamental to contemporary corporate finance and strategic management theory. Firm value is a holistic assessment of a firm's capacity to provide sustainable economic returns to maximize shareholder wealth, while negotiating the claims of other stakeholders. Firm value is the market's collective judgment regarding a firm's profitability, growth opportunities, governance quality or sophistication, and strategic long-term positioning. Thus, firm value is interpreted as a performance metric but also a surrogate for managerial efficiency, investor confidence, and corporate resilience and sustainability. As such, there is considerable interest in the determinants of firm value, and these can be examined from multiple vantage points, not limited to capital structure optimization, ownership models, and strategic deployment of intangibles. Although there have been decades of empirical inquiry into these matters, there is still uncertainty regarding how such matters interact to shape firm value, especially in emerging economies where the institutional context, post-colonial governance arrangements, or market functionality can diverge significantly from developed markets.

In this larger frame of reference, organizational capital (OC) has developed into a critical yet under-researched intangible factor of firm value. OC refers to the totality of a firm's knowledge, systems, managerial processes, culture, and routines that allow the firm to integrate and coordinate activities effectively, deal with change, and innovate. Organizational capital is associated with greater adaptability, productivity, and capability to innovate; all of which are required to gain and hold a competitive advantage while creating value. While it is increasingly recognized as

important for knowledge economies, research examining OC's direct and interactive influences on firm value remains limited, particularly in developing economies (like Pakistan), where the organizational systems are often not as formalized, and governance challenges loom larger.

In addition to the function of intangible assets, capital structure, the balance of debt and equity financing, remains one of the most long-studied topics within financial theory. Based on the Modigliani–Miller propositions, trade-off, and pecking order theories, capital structure (CS) decisions can have a significant effect on firm value by changing the costs of financing, tax advantages, and risk exposure. Ownership structure plays a significant governance role in establishing control and monitoring incentives within firms. Ownership that is overly concentrated may diminish agency conflicts and motivate executives to make decisions that correspond to shareholder priorities, but selection effects of ownership that are too concentrated may lock in management and diminish the value of the firm. Therefore, ownership concentration, capital structure, and ownership structure together are the catalysts from which firms seek to add value internally.

Nonetheless, the connotation between these firm-level attributes and firm value is often conditional on external governance structures and strategic financial actions. Two important moderating effects are audit quality (AQ) and tax avoidance (TA). Audit quality has an effect on the firm by increasing corporate transparency and credibility, decreasing information asymmetry, and limiting opportunistic managerial behaviour, thus possibly adding more increment to the positive effects of OC, CS, and OS on firm value. In another scenario, tax avoidance can be viewed as a double-edged financial strategy. Tax avoidance can add value to the firm by retaining cash flows and reducing tax liability if properly executed. On the contrary, tax avoidance can create regulatory risk and signal governance weakness to various stakeholders if viewed as overly aggressive or opaque. Therefore, AQ and TA have a combined moderated effect that substantiates a clearer understanding of how governance quality and financial considerations interact with an internal firm's capabilities to derive value creation.

The corporate landscape in Pakistan provides an interesting empirical setting for this research. With concentrated ownership structures, family-owned business groups, and changing audit and disclosure structures, Pakistan represents a dynamic field of research to explore the interaction between OC, CS, and OS. The contextual features of emerging economies, like inefficiencies in institutions, limited protection for shareholders, and developing financial markets, accentuate the need for replicated or localized evidence to validate and extend existing theories, mostly established based on Western economies.

This research offers significant theoretical and empirical contributions. First, it offers an integrative framework for examining the simultaneous effect of organizational capital, capital structure, and ownership structure on firm value, which is rarely studied in the context of emerging economies. It contributes to the literature by introducing audit quality and tax avoidance as moderating variables providing a deeper understanding of the effect of quality of governance and fiscal behaviour on the OC–CS–OS–FV relationships. It also employs rigorous econometric techniques in its analysis, including OLS, fixed effects, and GMM estimations, which address endogeneity and make causal inference stronger. Finally, it contributes to the contextual literature about Pakistan, providing evidence-based advice for policy makers, investors and managers in optimizing firm value under governance and institutional constraints.

In summary, this study provides valuable theoretical and practical knowledge regarding how internal organizational capabilities, financing decisions and ownership structures interrelate with external governance and tax behaviour to create firm value. In grounding the study in the realities of a developing economy, the research contributes useful insight into sustainable value creation, corporate transparency and governance reform in emerging economies.

CHAPTER 2: LITERATURE REVIEW

The establishment and optimization of firm value (FV) is the main goal in contemporary corporate finance. It is a function of the firm's tangible and intangible resources, financing options, and governance forms. The previous chapter presented the theoretical justification for investigating the role of organizational capital (OC), capital structure (CS), and ownership structure (OS) on firm value and the moderating effects of audit quality (AQ) and tax avoidance (TA). This chapter continues the analysis by reviewing relevant theoretical perspectives and empirical literature, eventually leading to a set of testable hypotheses.

The review draws from important theoretical perspectives, such as the Resource-Based View (RBV), Agency Theory, Trade-off and Pecking Order Theory, and Signalling Theory, to further describe how organizational, financial, and governance factors work together to shape firm value. The discussion also identifies limitations in prior research and contextualizes organizational, financial, and governance issues in Pakistan's emerging market environment.

2.1. Theoretical Evidence

2.1.1. Resource-based View

According to the Resource-Based View (Barney, 1991), firms can achieve superior performance and value creation through the development and deployment of resources that are unique, valuable, rare, inimitable, and non-substitutable. (OC), firm-specific internal knowledge systems, management processes, culture, and routines, meet

these criteria as a strategic intangible asset. Thus, firms with well-developed OC have a comparative advantage in coordinating operations, fostering innovation, and responding to environmental changes, thereby creating value for the firm. Consequently, the RBV provides the theoretical lens through which OC's value-creating contributions may be understood.

2.1.2. Agency Theory

Agency theory (Jensen & Meckling, 1976) addresses conflicts of interest in assessing the impact of agents (managers) and principals (shareholders) on the firm's value. The ownership structure (OS) and audit quality (AQ) are discussed as governance mechanisms to alleviate agency costs. With a concentrated ownership structure, access to increased control can lead to monitoring improvements; however, concentrated ownership can also lead to the expropriation of minority shareholders. Similar to ownership structure benefits, high audit quality diminishes information asymmetry, enhances the credibility signal to investors, and constrains the opportunistic behaviour of managers, all leading to mitigating agency costs for enhancing firm valuation.

2.1.3. Trade-off and pecking order theory

The Trade-off Theory (Kraus & Litzenberger, 1973) indicates that companies would choose their optimal capital structure by weighing the tax benefits of having debt against bankruptcy costs. Conversely, the Pecking Order Theory (Myers & Majluf, 1984) suggests that companies will want to use internal financing first, before issuing debt in instances where internal capital is insufficient. Both theories suggest that firm value provided by capital structure decisions depends on financial leverage and the trade-off between risk and return.

2.1.4. Signalling theory

As per Signalling Theory (Spence, 1973), corporate behaviour provides information regarding the firm's quality to external stakeholders. The quality of the audit attaches reliability and transparency to the financial statements, while the tax avoidance aspect of a firm and in nature, can signal prudent financial management or opportunism by management, depending on context. Each of these signals will subsequently impact the investors' perceptions of the firm's value.

2.2. Hypothesis Development

2.2.1. Impact of Organizational Capital on Firm Value

According to the RBV perspective, organizational capital is a firm-specific asset that enhances productivity or innovation (Lev & Radhakrishnan, 2005). Strong OC allows for more efficient resource allocation, learning, and knowledge sharing, which increases performance and ultimately firm value. Additionally, firms with higher OC are more capable of exploiting market opportunities, sustaining competitive advantage, and establishing stakeholder confidence.

Research has substantiated the beneficial association between OC and firm performance and valuation. Eisfeldt & Papanikolaou (2014) showed that firms with elevated levels of OC benefit from increased productivity and market valuations. In another study by Corrado et al. (2009) found useful evidence of OC investments having a material effect on value creation in knowledge-based industries. However, studies on OC in emerging economies (Abdullahi et al., 2021; Khan et al., 2020) provide mixed evidence and suggest institutional and governance factors could moderate the OC and FV relationship.

Thus, the theoretical and empirical reasoning support that by improving innovation capacity and operational efficiency, it is expected that higher organizational capital enhances the value of the firm.

H₁: Organizational Capital has a significant impact on Firm Value

2.2.2. Impact of Capital Structure on Firm Value

The capital structure is the proportion of debt and equity a firm uses to finance its assets. The Trade-off Theory states that there is an optimal level of leverage at which the marginal benefit of more debt equals its marginal cost, allowing a firm to maximize firm value. In contrast, excessive leverage raises the cost of financial distress, reducing firm value. The Pecking Order Theory contends that firms opt for internal financing at all costs; however, deviation from their preferred method of financing may signal to the shareholders that there is information asymmetry.

Though empirical investigations into the relationship between capital structure and firm value have produced mixed findings, Modigliani and Miller (1958) posited that capital structure is irrelevant in perfect markets. Subsequent literature (Jensen, 1986; Titman & Wessels, 1988) has supported the theorized influence of leverage on valuation through tax benefits and agency costs. In emerging markets, empirical studies (Shah & Hijazi, 2004; Khan et al., 2019) have suggested that moderate leverage is positively associated with firm value; however, leverage was shown to reduce firm valuation as financial risk was observed to increase when excessive debt was utilized.

Taking into consideration theoretical and empirical evidence, this study proposes the following:

H₂: Capital Structure has a significant impact on Firm Value

2.2.3. Impact of Ownership Structure on Firm Value

Agency Theory, essentially, gives rise to understanding the implications of ownership dispersion on firm performance and value. With concentrated ownership, managerial incentives are aligned with those of shareholders, and agency costs resulting in a loss of firm value are minimized. However, entrenchment theory indicates that when owners exert

significant control, the interests of the controlling shareholders are often prioritized at the expense of minority interests, and the decision-making process becomes inefficient.

The research literature, however, indicates a mixture of findings on these different aspects. For example, Demsetz & Lehn (1985) and Shleifer & Vishny (1997) highlight the benefits of monitoring by owners of concentrated ownership, while Claessens et al. (2002) suggested that entrenchment effects can also occur in the case of family ownership. Emerging economies that have studied ownership concentration, such as Cheema & Din (2020) and Rashid & Islam (2021), associate the effects of ownership concentration on firm value with the level of institutional quality and investor protection.

H₃: Ownership structure has a significant impact on firm value.

2.2.4. Moderating Role of Audit Quality

Audit quality (AQ) defines the extent to which financial statements adequately represent the true economic situation of a firm without material mis-statements or management bias (DeAngelo, 1981). High levels of audit quality increase the reliability of disclosed information, which produces investor confidence and enhances firm value. Evidence in the empirical literature supports the importance of audit quality as a moderating or mediating variable that affects firm performance or valuation, but this will often correspond to the institutional and regulatory environment of a given firm.

Organizational capital (OC), the advanced manager processes, culture, and capabilities for innovation, often relies on faithful representation via financial reporting. When firms have OC at high levels, there are gains from these high levels which are not identified by outside stakeholders due to information asymmetry and the intangible nature of their assessment. A higher quality audit reduces uncertainty or noise in the earnings figures when evaluated in relation to the intangible assets of OC. Francis, LaFond, Olsson, and Schipper (2005) state that higher quality audits reduce the influence of noise when assessing earnings based on intangible assets and lead to a larger market value. Results of the studies by Li, Pike, and Haniffa (2008) indicate that an external audit input to the economic accrual model increases disclosure in technical intellectual capital and provides credibility to investors. Similarly, Cho et al. (2020) in their studies found that firms with OC at higher levels, in relation to an audit through a Big Four firm, have a stronger positive association between OC and the firm's performance due to a higher level of financial credibility.

Thus, the audit provides credibility and transparency to OC investments in terms of firm value.

The relationship between capital structure and firm value is also affected by the quality of audits through the cost of capital, risk assessment, and investor perception. Results of the study by Watts & Zimmerman (1986) explain that high-quality audits limit managers' ability to manipulate higher leverage ratios for their benefit, in order to provide a more accurate portrayal of the firm's level of indebtedness in their financial reports. Pittman & Fortin (2004) also show that firms with high-quality auditors have a lower cost of debt when creditors regard the audited statements as sufficiently reliable signals of the firm's solvency. Ahmed, Hossain, & Adams (2006) and Lin et al. (2020) demonstrate that high audit quality lessens the negative association of excessive leverage on firm value by fostering improvements in investor confidence in financial disclosures and decreasing perceived bankruptcy risk. Therefore, high audit quality provides more relevant context for investors to evaluate capital structure decisions, resulting in better price efficiency in the market.

Ownership concentration and management ownership or shareholding affect the quality of governance, although the extent to which monitoring takes place and transparency is achieved is conditional on the presence of quality, external auditors or their equivalent. Fan & Wong (2005) find that with ownership structure concentrated in the East Asian firms they studied, high-quality audits are critical to alleviating entrenchment and expropriation issues. Boone et al. (2010) find that audit quality serves as a complement to ownership monitoring of management by providing the assurances that financial statements are accurate, among other outcomes, and this helps protect minority shareholders. Khurana & Raman (2004) demonstrate that clients of Big Four public accounting firms encounter lower levels of earnings management in their financial statements and that the market values these firms at higher valuations than comparable firms subject to other auditors, particularly in concentrated ownership structures. In emerging markets such as Pakistan, where ownership is typically highly concentrated in families and legal protections for investors are relatively weak, the quality of the audit represents a substitution for a weak internal and external governance structure to enhance or mitigate the positive effect of ownership structure on firm value, or negatively affect ownership structure on firm value.

In Pakistan, corporate governance systems usually have weak enforcement and concentrated family ownership, which causes information asymmetry and limited investor protection. Therefore, audit quality plays a significant moderating role. Yasmeen & Ahmad (2020) and Afza & Nazir (2018) demonstrate that firms with Big Four auditors have larger market valuations and better financial performance. Rehman & Ali (2019) also suggest that high-quality audits curtail earnings management, which increases transparency and credibility to the firm. In such institutional settings, audit quality is an important mechanism that holds firms accountable, strengthens firm-specific factors, and increases market confidence in reported performance.

The following hypotheses are proposed, drawing on the above theoretical and empirical insights:

H_{4a}: Audit quality positively moderates the relationship between Organizational Capital and firm value

H_{4b}: Audit quality positively moderates the relationship between Capital structure and firm value

H_{4c}: Audit quality positively moderates the relationship between Ownership structure and firm value

2.2.5. Moderating Role of Tax Avoidance

Tax avoidance (TA) is the use of legal means by firms to reduce taxes so that they can increase potential earnings, which can lead to increased firm value (Hanlon & Heitzman, 2010). However, the impacts of tax avoidance on firm value can be theoretically ambiguous; it can be used as a value-creating efficiency, or it can be viewed as a value-decreasing sign of managerial opportunism, depending on the governance environment.

Empirical studies exploring the impact of tax avoidance on firm value show mixed evidence that is often contextual and conditional. The literature suggests evidence for value-improving and value-degrading impacts of taxes on firm value; again, preliminary evidence suggests tax avoidance is conditional.

Organizational capital, which is the intangibility of firms' ability to manage knowledge and innovate, necessitates ongoing financial support. Tax avoidance can produce internal capitalization, or liquidity, to facilitate investments and further congeal the relationship of organizational capital and firm value. However, if internal tax avoidance is perceived as aggressive or opaque, then investors will likely discount the potential value of organizational capital due to perceptions regarding ethical and regulatory risk.

Desai & Dharmapala (2009) found that tax avoidance increased firm value only to the extent that the firm employed strong governance mechanisms to limit managerial opportunism. Chen et al. (2010) discovered that firms with transparent governance structures exhibited a positive relationship between tax savings and firm value, whereas firms with poor governance structures exhibited a negative relationship. Armstrong, Blouin, & Larcker (2012) examined tax avoidance as a determinant of firm value in the presence of monitoring and disclosure controls to facilitate distinguishing between tax avoidance as efficient and opportunism where tax avoidance would decrease the firm's value. In summary, for a firm with sound governance structures and strong organizational capital, tax avoidance can enhance the positive influence of organizational capital on firm value by reallocating tax savings into intangible investments for productive purposes.

Decisions about capital structure affect tax liabilities through the interest tax shield effect; debt financing lowers taxable income and, thus, lowers corporate taxes. Therefore, tax avoidance interacts directly with leverage decisions in the determination of firm value. In their 1963 paper, Modigliani & Miller established that debt creates tax shields and positive firm value can take place when the marginal benefit of debt is greater than its expense. In his 2000 paper, Graham quantifies the value of tax shield interest deductibility, noting that it can comprise a significant percentage of the value of the firm. Cheng, Huang, Li, & Lobo (2012) show that firms that employ more tax avoidance, when compared to firms that use less tax avoidance, have a stronger leverage-performance relationship. In other words, firms that employ debt financing and tax planning create more after-tax profitability. In contrast, Frank, Lynch, & Rego (2009) warn that too much tax avoidance, when combined with leverage, creates excess regulatory risk and earnings volatility that can create lower firm value. Consequently, tax avoidance is a moderating variable in the capital structure-firm value link that can extend the benefits of optimal leverage through tax savings or allow for more financial risk when excessive tax avoidance negatively affects credibility or solvency.

The impact of tax avoidance on firm value depends on ownership concentration and managerial shareholding. On the one hand, a controlling shareholder may use taxes to maximize the firm's resources and wealth; in weak corporate governance environments, however, they may engage in tax avoidance to enrich themselves at the expense of minority investors, resulting in loss of valuation. Desai & Dharmapala (2009) demonstrated that the positive effect of tax avoidance, operationalized as the extent of loss to the firm, on firm value only held in a strong governance environment, suggesting ownership structure was relevant in moderating this relationship. Chen et al. (2010) further noted that tax avoidance can at times allow family-owned firms to manage earnings, thus reducing long-term firm value.

Rego & Wilson (2014) argued that ownership concentration moderates the effectiveness of tax avoidance as the means to maximize firm value; in concentrated ownership, ownership can monitor and penalize managerial updates, thus tax avoidance can hypothetically enhance value-maximizing behaviour, whereas under dispersed ownership, the owner in some cases simply cannot oversee, thus tax avoidance behaviour can hypothetically reduce value. In emerging markets, Ahmed & Habib (2021) found there is a corresponding positive effect of tax avoidance on valuation, relatively compliant tax behaviours with foreign and institutional owners and a more aggressive approach to tax avoidance in family-controlled firms. Thus, the moderating effect of tax avoidance on the relationship between ownership concentration and firm value is conditional on ownership structure and quality of governance, and can either magnify or reduce firm value under an ownership structure conducive to disciplined ownership, and vice versa, where managerial opportunism is present.

In Pakistan's emerging market environment, the tax context presents features such as high corporate tax rates, weak enforcement, and complicated tax regulations that encourage tax avoidance and provide opportunities for firms to exploit in regard to tax avoidance. Khurshid, Gulzar, & Naeem (2018) and Khan & Ahmed (2021) found that firms engage in tax avoidance as a tool for liquidity management and cash flow conservation. They noted that the effect of tax avoidance on firm value, however, is contingent upon governance mechanisms and transparency. Saeed & Sheik

(2020) noted that firms that engage in moderate tax avoidance would improve firm performance by increasing financial flexibility and internal financing capacity. Yasmeen & Ahmad (2021) found that aggressive avoidance, especially in the presence of weak audit enforcement, leads to lower levels of confidence by investors in the firm, and hence lower market valuation. Ali, Raza, & Shabbir (2022) highlighted the effect of tax avoidance in conjunction with capital structure and ownership concentration as it pertains to firm valuation, indicating that in certain sectors it has a different effect than others. Thus, in such an evolving corporate governance context in Pakistan, tax avoidance serves as a context-dependent moderator that enhances or diminishes the relationship between organizational and financial behaviour of firms with regard to firm value.

Based on the theoretical arguments and evidence cited above, this study suggests that tax avoidance moderates the relationships between tax avoidance and company value, and that moderation is either positive or negative, depending on transparency and governance aspects of tax planning.

H_{5a}: Tax avoidance positively moderates the relationship between Organizational Capital and firm value

H_{5b}: Tax avoidance positively moderates the relationship between Capital structure and firm value

H_{5c}: Tax avoidance positively moderates the relationship between Ownership structure and firm value

This chapter has thoroughly addressed an empirical and theoretical background employing organizational capital, capital structure, ownership structure, audit quality, and tax avoidance on firm value or enterprise worth. The chapter provided a strong theoretical foundation tapping established theories titled Resource-Based View, Agency Theory, Trade-off Theory and Pecking Order Theory, and Signalling Theory to shed light on how internal resources, financing decisions, and ownership structures interact to influence the value of the firm. This discussion showed that organizational capital, as a strategic intangible resource, helps in productivity and innovation, capital structure affects financial viability and risk, and ownership structure affects its governance and monitoring. Audit quality and tax avoidance were, as proposed, treated as constructs that might strengthen or weaken the link between the concepts above as a moderator, depending on the institutional context and transparency of the firm's practices.

Through the convergence of theoretical reasoning and the use of empirical evidence dependent on both developed and developing markets, this chapter generated a series of testable propositions that encapsulate the multi-dimensional drivers of firm value in Pakistan's advancing corporate milieu. The amalgamation of these constructs is a contribution to the literature because it provides a model predicated on the holistic interplay of internal organizational processes and external governance influences on value creation. The next chapter describes the research methodology, including data sources, variable measurement, model specification, and econometric techniques employed to test the hypotheses cogently.

CHAPTER 3: RESEARCH METHODOLOGY

The methodological framework employed by this study seeks to reinforce the study's robustness, reliability, and validity of the empirical analysis. This chapter addresses the research philosophy and design, the data collection process and criteria for sample selection, detailed definitions and measurements employed for all the variables in the research, model specification and estimation, and econometric technique employed to address potential endogeneity, heteroskedasticity and serial correlation. The methodology demonstrates the purpose of the study, which is to provide rigorous evidence on how intangible, financial, and governance factors jointly affect firm value in an emerging market like Pakistan that has institutional and regulatory conditions that vary considerably from developed economies.

This research employs a quantitative, explanatory, longitudinal (panel) research design that is appropriate for investigating causal relationships and dynamic interactions between variables, across firms and over time. The explanatory nature of the research facilitates testing hypotheses derived from theory regarding how OC, CS, and OS are impacting FV, and the moderating effect of AQ and TA on these relationships.

3.1. Data Descriptives

We use a panel data approach that combines cross-section (firm-level) and time-series (year-specific) observations. This design has several advantages; It controls for individual firm heterogeneity and minimizes omitted variable bias. It adds degrees of freedom and efficiency to the estimates. It allows the sophistication of the analysis by estimating dynamic effects and capturing short and long-term impacts on firm value. The analysis employs a Generalized Method of Moments (GMM) to add robustness and mitigate endogeneity and simultaneity biases that could arise due to reverse causality or omitted variable bias.

The research is conducted within a positivist paradigm that values objectivity, measurability, and statistical testing. The positivist methodological approach aligns the study with its goal of testing theoretically derived hypotheses and establishing empirical relationships among observed data. Positivism is reflected in the use of secondary data and econometric modelling based on the assumption that social and economic phenomena can be studied as an observable response in analyzing normative evidence and explaining and forecasting phenomena.

The population for the research includes non-financial companies publicly listed on the Pakistan Stock Exchange (PSX). The financial sector is left out in this analysis because of the unique regulatory structure every entity in that sector must comply with, capital requirements that differ from non-financial firms, and accounting practices that differ

from non-financial firms. A balanced panel dataset of firms is constructed for a fixed length of time from 2014–2024, based on the availability and consistency of data. Firms are excluded from the final sample if there is any missing or incomplete data associated with the key variables of interest to maintain scientific rigour.

3.2 Variable and Measurement

In measuring the value of the firm, Tobin's Q (a market-based measure of firm value) and Return on Equity (ROE) (an accounting-based measure of profitability) were used to reflect slightly different aspects of value and profitability. Organisational Capital (OC) was used as a proxy for the intangible assets divided by total assets, as noted in Peters & Taylor (2017). Capital Structure (CS) was measured as the debt-to-assets ratio. The number of Shares held by Institutions/Managers/family divided by the total number of shares is used to measure the ownership structure(OS). Audit Quality (AQ) was not continuous and was coded as 1 if the firm had been audited by a Big-4 firm and 0 if not (DeAngelo, 1981). Tax Avoidance (TA) was also a continuous variable defined as the effective tax rate (ETR), which is a summary of all taxes paid divided by pre-tax income. Therefore, the more tax avoidance, the lower the effective tax rate. The control variables used in the model were the firm size measured as the natural log of total assets, firm growth (annual growth rate of sales) and leverage (ratio of long-term debt to total equity).

Table 1 Variables Definitions and Sources

Variable	Proxy / Formula	Type	Source
Firm Value	Tobin's Q = (Market Value / Book Value); ROE = Net Income / Equity	Dependent	Thomas Reuters' Data Stream
Organisational Capital (OC)	Intangible Assets / Total Assets	Independent	Thomas Reuters' Data Stream
Capital Structure (CS)	Total Debt / Total Assets	Independent	Thomas Reuters' Data Stream
Ownership Structure(OS)	No. of Shares held by Institutions, Managers, Family / Total number of shares	Independent	Thomas Reuters' Data Stream
Audit Quality (AQ)	1 = Big 4 Auditor, 0 = otherwise	Moderator	Thomas Reuters' Data Stream
Tax Avoidance (TA)	Total income tax expenses-deferred income tax expenses/ pre-tax book income-special items	Moderator	Thomas Reuters' Data Stream
Firm Size	ln (Total Assets)	Control	Thomas Reuters' Data Stream
Firm Growth	% Change in Sales	Control	Thomas Reuters' Data Stream
Leverage	Long-Term Debt / Equity	Control	Thomas Reuters' Data Stream

3.2.2 Model 1: Firm Value Equation

$$\ln(FV_{it}) = \alpha_1 \ln(FV_{i,t-1}) + \beta^1 \cdot \ln octa_{it} + \beta^2 \cdot \ln CS_{it} + \beta^2 \cdot \ln OS_{it} + \beta^4 \cdot (\ln octa \times AQ)_{it} + \beta^5 \cdot (\ln CS \times AQ)_{it} + \beta^6 \cdot (\ln OS \times AQ)_{it} + \beta^7 \cdot (\ln octa \times TAB)_{it} + \beta^8 \cdot (\ln CS \times TAB)_{it} + \beta^9 \cdot (\ln OS \times TAB)_{it} + \beta^{10} \cdot (\ln octa \times TAC)_{it} + \beta^{11} \cdot (\ln CS \times TAC)_{it} + \beta^{12} \cdot (\ln OS \times TAC)_{it} + \beta^{13} \cdot \ln Size_{it} + \beta_{14} \cdot \ln Growth_{it} + \beta_{15} \cdot \ln Lev_{it} + \varepsilon_{it} \dots \dots \dots (1)$$

Here, firm value is modelled as a function of its lagged value, organizational capital and capital structure. The interacting terms audit quality and tax avoidance capture their moderating role. Control variables are firm size, growth and leverage. The lagged dependent variable (FV) allows for persistence that justifies the use of GMM.

3.2.3 Model 2: Firm value (Profitability) Equation

$$\ln ROE_{it} = \beta^0 + \beta^1 \cdot \ln octa_{it} + \beta^2 \cdot \ln CS_{it} + \beta^2 \cdot \ln OS_{it} + \beta^4 \cdot (\ln octa \times AQ)_{it} + \beta^5 \cdot (\ln CS \times AQ)_{it} + \beta^6 \cdot (\ln OS \times AQ)_{it} + \beta^7 \cdot (\ln octa \times TAB)_{it} + \beta^8 \cdot (\ln CS \times TAB)_{it} + \beta^9 \cdot (\ln OS \times TAB)_{it} + \beta^{10} \cdot (\ln octa \times TAC)_{it} + \beta^{11} \cdot (\ln CS \times TAC)_{it} + \beta^{12} \cdot (\ln OS \times TAC)_{it} + \beta^{13} \cdot \ln Size_{it} + \beta_{14} \cdot \ln Growth_{it} + \beta_{15} \cdot \ln Lev_{it} + \varepsilon_{it} \dots \dots \dots (2)$$

In this model, firm value (profitability) is explained by capital structure, organizational capital, along with their interactions with tax avoidance and audit quality. To isolate the effects, the firm-specific controls (size, growth, leverage) are included.

Where;

O.C. = Organizational Capital
CS = Capital Structure
OS = Ownership Structure
AQ = Audit Quality
TA = tax avoidance
Size = Size of the firm
Growth = Growth of the firm
Lev = Leverage
€ = Error term

CHAPTER 4: RESULTS AND DISCUSSION

This section includes summary statistics for all of the variables studied. Descriptive statistics are essential for gauging the central tendency, dispersion, and range of values of each variable, which will help in the assessment of the dataset's appropriateness for subsequent econometric analysis (Gujarati & Porter, 2009).

Table 4.1: Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
OCTA	591	47.298	37.839	0.874	183.624
CS	591	0.0279	0.0512	0.000000042	0.2612
FV	591	0.4799	0.3721	0.0067	1.7736
ROE	591	0.0000502	0.0000567	-0.0001172	0.0002003
inst_own	591	0.0764	0.0755	0.0000	0.3092
dir_own	591	0.3536	0.3271	0.0000	1.1742
FS	591	11.5705	1.4726	6.8305	15.1344
Lev	591	0.0941	0.0850	0.00002	0.3568
Growth rate	591	-0.0046	0.2311	-0.5870	0.6114
TAB	591	0.0002377	0.000199	-0.0003168	0.0007831
AQ	591	0.3046	0.4606	0.0000	1.0000
TAC	591	0.0002897	0.0007817	-0.0049587	0.0114934
family_dummy	536	0.8396	0.3674	0.0000	1.0000

Descriptive statistics on the variables used in the analysis are presented in Table 4.1. Clearly, there is considerable variation across firms, suggesting differences in firms' strategic, financial, and governance characteristics.

The table displays summary statistics for non-financial companies on the Pakistan Stock Exchange (PSX). The average Organizational Capital (OC) is 47.30, and the variation is large, indicating considerable variance in firms' investment in intangible assets. Capital Structure (CS) is low (avg. = 0.028), indicating conservative leverage, while Firm Value (FV) has an average value of 0.48, indicating moderate market value. ROE and Tax Avoidance (TA) averages are low and stable, indicating limited variation in firm profitability and tax aggressiveness. Ownership patterns reveal higher Director Ownership (0.35) on average than Institutional Ownership (0.08), suggesting stronger internal control. Average Firm Size (FS) is 11.57, suggesting a mix of small and large firms, and low average Leverage (0.09). Growth rate average is slightly negative (-0.0046) indicating firms are growing very slowly or declining, and the average Audit Quality (AQ) suggests around 30% of firms are receiving audit services from high-quality auditors. Most firms ($\approx 84\%$) are family-owned consistent with corporate governance patterns in Pakistan.

Overall, these descriptive patterns suggest that organizational capital and ownership patterns might have a significant impact on firm value and profitability, while the low leverage and tax avoidance indicate limited potential influence of debt and aggressive tax planning in expected regression models.

Table 4.2: Correlation Matrix

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. Firm Value (FV)	—											
2. Return on Equity (ROE)	.519**	—										
3. Organizational Capital (OCTA)	.460**	.181**	—									
4. Capital Structure (CS)	.074	-.010	.165**	—								
5. Tax Avoidance (TAB)	.036	.075	-.074	-.006	—							
6. Firm Size (FS)	.106*	.217**	-.228**	-.258**	.061	—						
7. Growth Rate	.135**	.276**	.067	.034	.050	.086*	—					
8. Leverage (Lev)	-.025	.042	-.143**	-.174**	-.065	.225**	.089*	—				
9. Institutional Ownership (Inst_own)	.111**	.144**	.069	-.100*	.039	.228**	.016	-.065	—			
10. Director Ownership (Dir_own)	-.127**	-.097*	.124**	.227**	-.113**	-.385**	.068	.069	-.270**	—		
11. Family Ownership (Dummy)	.049	.062	-.071	-.095*	.030	.098*	.021	-.044	.067	-.121*	—	
12. Audit Quality (AQ)	.089	.074	.083	-.068	.041	.095	.056	-.034	.058	-.072	-.063	—

Table 4.2 shows the pairwise correlation coefficients among the study variables. The results indicate a number of statistically significant relationships that shed some preliminary light on firm-level attribute relationships. Organizational capital (OC) has a positive correlation with firm value ($r = 0.460$, $p < 0.01$), reaffirming the resource-based view (RBV) perspective that firms that invest in knowledge-based and intangible assets are better suited to improve value creation and maintain a competitive advantage. Firm size (FS) has a weak, but significant, positive correlation with firm value ($r = 0.106$, $p < 0.05$), documenting that as firms only increasing, they receive scale efficiencies and accrue greater market credibility while the growth rate ($r = 0.135$, $p < 0.01$) also positively correlates with firm value, meaning expanding firms are perceived favorably by investors. Inversely, leverage (Lev) has a weak, but negative correlation with firm value ($r = -0.025$, $p > 0.10$), consistent with the trade-off theory that excess debt exposure can result in increased financial risk and decrease firm valuation.

Overall, the estimated correlation coefficients are below the traditional multicollinearity cutoff ($r < 0.80$), indicating that the independent variables do not exhibit high collinearity and can reasonably be included in regression models. The correlations are informative as a theoretical and empirical frame of reference, albeit they do not produce dynamic or causal relationships. Accordingly, the following sections provide regression estimations like GMM to formally assess the hypothesized effects of organizational capital, capital structure, and ownership structure on firm value, while assessing the moderating effects of audit quality and tax avoidance.

Table 4.3: Moderating Effect of Audit Quality on Firm Value

Predictor Variable	Coefficient (β)	Std. Error	z	p	95% Confidence Interval
Lagged Firm Value (L1.FV)	0.6999	0.0213	32.80	0.000	[0.6581, 0.7418]
Institutional Ownership (inst_own_z)	0.0007	0.0211	0.03	0.972	[-0.0406, 0.0420]
Director Ownership (dir_own_z)	-0.0353	0.0215	-1.64	0.101	[-0.0773, 0.0068]
Organizational Capital (OCTA_z)	0.4090	0.0400	10.21	0.000	[0.3306, 0.4875]
Capital Structure (CS_z)	0.4950	0.2632	1.88	0.060	[-0.0208, 1.0109]

Predictor Variable	Coefficient (β)	Std. Error	z	p	95% Confidence Interval
Audit Quality (AQ _z)	-0.0919	0.0531	-1.73	0.083	[-0.1959, 0.0121]
Firm Size (FS)	0.0348	0.0150	2.32	0.021	[0.0054, 0.0643]
Leverage (Lev)	0.4578	0.1239	3.69	0.000	[0.2149, 0.7007]
Growth Rate	-0.0427	0.0489	-0.87	0.383	[-0.1386, 0.0532]
Institutional Ownership × Audit Quality (inst_own_AQ _z)	-0.0270	0.0216	-1.25	0.211	[-0.0693, 0.0153]
Director Ownership × Audit Quality (dir_own_AQ _z)	-0.0297	0.0203	-1.47	0.142	[-0.0695, 0.0100]
Organizational Capital × Audit Quality (OCTA_AQ _z)	-0.0644	0.0322	-2.00	0.045	[-0.1275, -0.0013]
Capital Structure × Audit Quality (CS_AQ _z)	-0.3785	0.2020	-1.87	0.061	[-0.7743, 0.0174]
Constant	-0.0743	0.1607	-0.46	0.644	[-0.3893, 0.2406]

Note: Dependent variable: Firm Value (FV). One-step System GMM estimator used. Robust standard errors reported. A significant p-value (< .05) indicates statistical significance.

The dynamic aspect of firm value is strong, given the high and significant coefficient on lagged value. The persistence indicates that firm value changes slowly and is reliant on past firm value, exhibiting path dependence and market stability. Organizational capital (OC) is the strongest and most significant determinant of firm value, again in the dynamic model. This support advocates for the Resource-Based View (RBV) and Knowledge-Based Theory, as investing in intangible capabilities (abilities, innovation systems, and internal processes) yields sustained competitive advantage. This is corroborated by empirical research conducted by Eisfeldt & Papanikolaou (2014) and Lev & Radhakrishnan (2005) that shows OC increases productivity and market measures of value. Leverage and firm size have positive and significant effects, similar to trade-off theory and the economies of scale argument, suggesting that a significant part of capital structure decisions and firm scale can positively impact firm value. Conversely, ownership structures (both institutional and director ownership) do not have a significant impact on firm value when the dynamic specification is applied, which leads to the belief that they have limited involvement in the governance of firms once controlling for endogeneity and persistence.

The interaction terms indicate that audit quality moderates important relationships. The negative coefficient of OC×AQ suggests that while organizational capital provides value to the firm, increased audit quality may limit the ability to opportunistically capitalize the firm's intangible assets through increased transparency of information. Similarly, the negative coefficient for CS×AQ implies that even if leverage has a positive valuation impact, increased audit quality may negate that benefit within an organization due to increased scrutiny. This is consistent with agency theory that suggests external monitoring limits the discretion of management. Overall, the GMM results reinforce the notion that organizational capital and the financial structure are jointly responsible for firm value, while audit quality has a constraining moderating influence, which ensures that reported performance reflects the economic substance rather than inflated valuations.

Table 4.4: Moderating Effect of Tax Avoidance on Firm Value

Predictor Variable	Coefficient (β)	Std. Error	z	p	95% Confidence Interval
Lagged Firm Value (L1.FV)	0.6579	0.0228	28.82	0.000	[0.6131, 0.7026]
Institutional Ownership (inst_own _z)	-0.0192	0.0211	-0.91	0.362	[-0.0605, 0.0221]
Director Ownership (dir_own _z)	-0.0449	0.0213	-2.11	0.035	[-0.0868, -0.0031]
Organizational Capital (OCTA _z)	0.4063	0.0344	11.80	0.000	[0.3388, 0.4738]
Capital Structure (CS _z)	0.0072	0.0182	0.39	0.694	[-0.0286, 0.0429]
Tax Avoidance (TAB _z)	0.0015	0.0362	0.04	0.967	[-0.0693, 0.0724]
Firm Size (FS)	0.0237	0.0135	1.76	0.079	[-0.0027, 0.0501]
Leverage (Lev)	0.4956	0.1239	4.00	0.000	[0.2527, 0.7385]
Growth Rate	-0.0480	0.0489	-0.98	0.327	[-0.1439, 0.0480]

Predictor Variable	Coefficient (β)	Std. Error	z	p	95% Confidence Interval
Institutional Ownership × Tax Avoidance (inst_own_TAB_z)	-0.0024	0.0188	-0.13	0.897	[-0.0393, 0.0344]
Director Ownership × Tax Avoidance (dir_own_TAB_z)	-0.0111	0.0220	-0.51	0.613	[-0.0543, 0.0320]
Organizational Capital × Tax Avoidance (OCTA_TAB_z)	-0.0535	0.0433	-1.24	0.216	[-0.1384, 0.0313]
Capital Structure × Tax Avoidance (CS_TAB_z)	-0.0052	0.0125	-0.41	0.680	[-0.0297, 0.0193]
Constant	-0.0247	0.1479	-0.17	0.868	[-0.3146, 0.2653]

The moderating variable tax avoidance (TA) and all interaction terms (i.e., OCTA×TA, CS×TA) were statistically insignificant, suggesting that tax avoidance does not significantly moderate the relationship between organizational capital, ownership structure or capital structure and firm value. This observation indicates that while tax planning can boost profitability in a short-term context, it will not have a measurable effect when assumed within a long-term firm valuation context.

In total, the combined findings from GMM suggest that audit quality acts as a governance-based constraint, enhancing transparency and limiting opportunistic reporting, while tax avoidance does not moderate, as it is short-term financial in nature and plays only a limited role in sustained value creation.

Table 4.5: Moderating Effect of Audit Quality on Firm Value (ROE)

Variable	Coefficient (β)	Std. Error	z-value	p-value	95% Confidence Interval
Lagged ROE (L1.ROE)	0.5052	0.0383	13.18	0.000	[0.4301, 0.5803]
Institutional Ownership (inst_own_z)	0.00000372	0.00000206	1.80	0.072	[-0.00000033, 0.00000777]
Director Ownership (dir_own_z)	0.00000054	0.00000207	0.26	0.796	[-0.00000353, 0.00000460]
Organizational Capital (OCTA_z)	0.0000186	0.00000362	5.13	0.000	[0.0000115, 0.0000257]
Capital Structure (CS_z)	0.0000692	0.0000256	2.71	0.007	[0.0000191, 0.0001194]
Audit Quality (AQ_z)	-0.00000836	0.00000514	-1.63	0.103	[-0.0000184, 0.0000017]
Firm Size (FS)	0.00000682	0.00000157	4.35	0.000	[0.00000375, 0.00000989]
Leverage (Lev)	-0.0000493	0.0000129	-3.82	0.000	[-0.0000746, 0.0000240]
Growth Rate	0.0000389	0.00000480	8.11	0.000	[0.0000295, 0.0000483]
Institutional Ownership × AQ (inst_own_AQ_z)	-0.00000054	0.00000213	-0.25	0.802	[-0.00000471, 0.00000364]
Director Ownership × AQ (dir_own_AQ_z)	-0.00000150	0.00000200	-0.75	0.452	[-0.00000541, 0.00000241]
Organizational Capital × AQ (OCTA_AQ_z)	-0.00000591	0.00000316	-1.87	0.061	[-0.0000121, 0.00000028]
Capital Structure × AQ (CS_AQ_z)	-0.0000566	0.0000197	-2.87	0.004	[-0.0000952, 0.0000180]
Constant	-0.0000308	0.0000161	-1.91	0.056	[-0.0000624, 0.00000083]

The GMM estimation examines the dynamic effects of return on equity (ROE) while moderating for audit quality (AQ). Results indicate a significant positive coefficient of the lagged dependent variable (L1.ROE = 0.505, $p < 0.001$), suggesting a substantial level of persistence in firm profitability; essentially, firms that are highly profitable in the prior period are likely to be highly profitable in future periods. This supports the appropriateness of the dynamic

estimation approach and is consistent with theories of profit persistence, which explain profitability persistence with stable advantages of strategic, operational, and resource-based efficiency.

Of the main explanatory variables, organizational capital (OC) has a positive and highly significant relation to ROE. Firms with a higher commitment to organizational capital, such as firm management, workforce development, and innovative capacity, tend to have more profitable prospects. This supports the resource-based view (RBV) that intangible resources lead to sustainable competitive advantage. Finally, capital structure (CS) has a positive and significant coefficient, suggesting that moderate leverage enhances firm profitability due to optimized capital investment and the tax shield of debt, consistent with the trade-off theory.

The control variables showed significant results in the expected direction. Firm size (FS) had a positive relationship to return on equity (ROE), indicating that larger firms experience economies of scale and favorable access to financing, while leverage (Lev) had a negative and significant relationship to ROE which demonstrates excessive borrowing may decrease profitability due to added interest obligations and financial risk. Growth rate had a strong positive relationship to ROE, indicating that growing firms will experience higher levels of profitability stemming from operational dynamism and increased market share.

The moderating effects of audit quality (AQ) yield mixed results. Audit quality for both OC×AQ and CS×AQ had negative and partly significant effects, indicating that audit quality diminishes the direction of the direct positive relationship organizational capital and capital structure have on profitability. This finding suggests that rigorous audit scrutiny inhibits financial structuring and aggressive accounting practices that would otherwise promote short-term profitability. This is consistent with agency theory, where high audit quality minimizes managerial discretion and opportunistic behaviour as the reported profits provide a reflection of genuine operational performance and not accounting gimmicks.

Table 4.6: Moderating Effect of Tax Avoidance on Firm Value (ROE)

Variable	Coefficient (β)	Std. Error	z-value	p-value	95% Confidence Interval
Lagged ROE (L1.ROE)	0.5083	0.0384	13.23	0.000	[0.4330, 0.5836]
Institutional Ownership (inst_own_z)	0.00000331	0.00000207	1.60	0.110	[-0.00000075, 0.00000736]
Director Ownership (dir_own_z)	-0.00000043	0.00000206	-0.21	0.833	[-0.00000447, 0.00000360]
Organizational Capital (OCTA_z)	0.0000175	0.00000269	6.50	0.000	[0.0000122, 0.0000227]
Capital Structure (CS_z)	-0.00000358	0.00000184	-1.94	0.052	[-0.00000719, 0.00000036]
Tax Avoidance (TAC_z)	-0.00000131	0.00000344	-0.38	0.703	[-0.00000805, 0.00000543]
Firm Size (FS)	0.00000541	0.00000141	3.82	0.000	[0.00000264, 0.00000818]
Leverage (Lev)	-0.0000384	0.0000126	-3.04	0.002	[-0.0000631, -0.0000137]
Growth Rate	0.0000371	0.00000483	7.68	0.000	[0.0000277, 0.0000466]
Institutional Ownership × TAC (inst_own_TAC_z)	0.00000711	0.00000316	2.25	0.024	[0.00000092, 0.0000133]
Director Ownership × TAC (dir_own_TAC_z)	0.00000634	0.00000380	1.67	0.095	[-0.00000111, 0.0000138]
OCTA × TAC (OCTA_TAC_z)	-0.000000675	0.00000396	-0.17	0.865	[-0.00000844, 0.00000709]
CS × TAC (CS_TAC_z)	0.000000875	0.00000119	0.74	0.461	[-0.00000145, 0.00000320]
Constant	-0.0000328	0.0000151	-2.17	0.030	[-0.0000624, -0.00000323]

Tax Avoidance (TAB) exhibits a positive direct relationship with ROE, thus supporting the tax efficiency perspective, yet it demonstrates no moderating influence on OC and CS. More particularly, while moderate tax financing

constitutes and is likely a contributor to positive profitability for firms, TAB does not alter the resource-performance relationship. Overall, the findings evidence the regulatory role of governance and fiscal mechanisms on shaping firm performance in developing corporate governance contexts such as that of Pakistan.

4.1. DISCUSSION

Organizational capital (OC) shows a positive and significant effect on firm value and on profitability. This finding confirms that investment in organizational capital, comprising employee training, innovative systems, and managerial processes, enhances long-term financial outcomes. This is consistent with the Resource-Based View (Barney, 1991), suggesting that intangible capabilities are rare, valuable, and inimitable resources that drive superior performance. Empirically, these results corroborate Lev and Radhakrishnan (2005) and Corrado et al. (2009), who found that organizational capital significantly improves productivity and market valuation. Within Pakistan's context, this result highlights the growing role of non-physical assets in sustaining competitiveness in industries facing technological transformation and institutional inefficiencies.

The capital structure (CS) positively contributes to firm value, both market and profitability. The positive direction supports the Trade-off Theory of Capital Structure (Myers, 1984), which states that when firms optimally utilize leverage, they are able to increase firm value by balancing the benefits of tax deductions with the costs of bankruptcy. For profitability, the positive effect is marginally significant, which suggests that firms with less than perfect leverage are able to increase return on equity by achieving greater returns through financial leverage. Empirical studies by Abor (2005) and Zeitun & Tian (2007) have uncovered similar evidence of a positive leverage-performance relationship in emerging markets, suggesting that debt may serve as a disciplining mechanism by alleviating free cash flow problems. However, the developing financial market in Pakistan may limit access to low-cost debt, which accounts for the relatively weaker significance.

Audit quality (AQ) acts as a moderator in the relationship between organizational capital, capital structure, and firm performance, often diminishing the positive consequences of OC and CS on ROE. This suggests that audits of high quality reduce managerial discretion, increase deterrents for opportunistic reporting, and enable financial performance to reflect actual operational performance. These findings mesh with agency theory, which argues that strong monitoring mechanisms lessen agency problems and empirical evidence in line with results of the study by DeFond & Zhang (2014) showing that audit quality improves transparency and investor confidence.

Tax avoidance (TA) has a positive moderating effect on the relationship between institutional ownership and ROE, which suggests that institutional investors may use tax planning to create value through profit maximization. However, TA does not show a significant moderating effect with any variable of interest, as it was insignificant with respect to director ownership, organizational capital, or capital structure. This indicates that tax may only be beneficial for governance mechanisms that have the ability to implement complex and advanced tax strategies. Findings support prior literature (Desai & Dharmapala, 2006) as institutional shareholders have the ability to add value and return on investments through tax policy implementation without compromising operational efficiency.

The results of this study provide complementary weight to the consistent evidence of how organizational capital, ownership structure, and capital structure significantly impact firm performance in the emerging market context of Pakistan. The discussion presented an interpretation of the GMM results using resource-based theory and agency theory to provide evidence that firms that leverage intangible resources, along with providing strong governance mechanisms, were able to generate higher firm value and profitability. The significance of the study is built on the moderating roles of audit quality (AQ) and tax avoidance (TA), where AQ improves transparency and builds the governance/performance relationship, while TA strategically enhances profitability through tax planning. This research adds to the literature by empirically demonstrating AQ and governance moderators in the context of a developing economy, with limited previous evidence in this area. The study's practical importance manifests through its contextual insight into the corporate sector in Pakistan, practical and theoretical value for policymakers, investors and managerial practice, to enable firms to drive long-term and sustainable firm growth through improved governance and resource usage.

CHAPTER 5: CONCLUSION

This research used dynamic panel-data estimation with one-step system GMM to analyze the determinants of firm performance, with performance measured in terms of firm value (FV) and return on equity (ROE), accounting for the moderating factors of audit quality (AQ) and tax avoidance (TA). This analysis produced the following findings. First, there is evidence of persistence of firm performance; lagged FV and ROE positively predict current performance. This suggests that firms utilize accumulated routines, knowledge, and managerial ability to maintain their competitive advantage over time. Second, organizational capital (OC) acts as a consistent and significant driver of both FV and ROE, supporting the resource-based view (RBV) perspective of intangibles as critical drivers of sustained value and profitability. Institutional ownership has a positive influence on Firm value (ROE), indicating the role of professional

monitoring in promoting firm performance, whereas director ownership has a limited effect. Capital structure has a limited effect on ROE and FV, but leverage has a consistently negative effect aligned with trade-off theory, due to the financing costs reducing returns.

In terms of the moderating roles of AQ and TA, they occupy distinct, albeit complementary roles. AQ moderates the relationships among organizational capital, capital structure, and profitability by creating governance restrictions to deter opportunistic behaviour and ensure that reported financial outcomes properly reflect operational results. In contrast, TA positively moderates the effect of institutional ownership on ROE, suggesting institutional owners may employ tax planning strategically to enhance profitability. However, TA moderation of the relationships among all other variables appears to be largely insignificant. Overall, the results suggest that sustainable firm performance is influenced by firm-specific resources, ownership structure, governance mechanisms, and strategic tax planning.

The outcomes of this study have important ramifications for corporate managers, investors, and policymakers interested in improving firm performance in the context of Pakistan's emerging market. First, the significant positive relation between organizational capital (OC) and firm value and profitability suggests the need for firms to invest in human resource development, managerial capacity, and innovative organizational systems. Additionally, policymakers and regulatory authorities, such as the Securities and Exchange Commission of Pakistan (SECP), should create incentives for firms to commit to long-term investment in knowledge-based assets that promote sustained competitive advantage. Second, the positive relationship between institutional ownership and firm performance suggests that institutional investors have a monitoring role that may support corporate governance. Hence, regulators should encourage strong transparency and disclosure policies that allow institutional shareholders to participate effectively in governance processes. In contrast, the weak or negative relationship between director ownership and performance suggests that excessive insider control may magnify agency problems. This indicates the need for strong governance codes that limit the concentration of ownership and protect board independence to reduce managerial discretion.

In third place, the essential function of tax avoidance (TA) between ownership and performance indicates that tax planning has the potential to improve profitability, as long as it stays ethical and legal. Thus, policymakers need to simplify tax systems and provide incentives for firms that engage in legitimate tax planning and compliance issues. The insignificant moderation effect of audit quality (AQ) indicates structural problems in Pakistan's audit oversight. By strengthening audit quality regulation, maintaining the independence of the auditor, and improving better enforcement capacity of the auditing process, we could restore the credibility of the audit / financial reporting process and investor confidence in the capital market. Lastly, the significant role of leverage (Lev) and firm size (FS) characteristics on performance suggests a balance between the advantages of a firm's capital structure policies and risks of financial distress. Thus, firms should strategically weigh the benefits of debt financing against the risk of financial distress, while regulators can help facilitate access to low-cost financing options as a way to stimulate productive investment in the corporate sector.

While this research contributes to our understanding of firm performance in Pakistan, there is still much to be explored in future research. Future research could explore sector-specific analyses to examine whether the relationships among organizational capital, ownership, and capital structure vary based on manufacturing, financial, and service sectors. Cross-country studies in emerging economies may also be able to identify whether the relationships we have identified are specific to the Pakistan economy or if they would hold across different institutional environments.

REFERENCE

1. Anik, S., Chariri, A., & Isgiyarta, J. (2021). The effect of intellectual capital and good corporate governance on financial performance and corporate value: A case study in Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(4), 391-402. DOI:10.13106/jafeb.2021.vol8.no4.0391
2. Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99-120. <https://doi.org/10.1177/014920639101700108>
3. Chen, S., Chen, X., Cheng, Q., & Shevlin, T. (2010). Are family firms more tax aggressive than non-family firms? *Journal of Financial Economics*, 95(1), 41-61. <https://doi.org/10.1016/j.jfineco.2009.02.003>
4. Dakhli, A. (2022). The impact of ownership structure on corporate tax avoidance with corporate social responsibility as a mediating variable. *Journal of Financial Crime*, 29(3), 836-852. DOI:10.1108/JFC-07-2021-0152
5. Danielova, A., Francis, B. B., Teng, H., & Wu, Q. (2023). The effect of organization capital on the cost of bank loans. *Journal of Financial and Quantitative Analysis*, 58(6), 2579-2616. <https://dx.doi.org/10.2139/ssrn.4057707>
6. Desai, M. A., & Dharmapala, D. (2009). Corporate tax avoidance and firm value. *Review of Economics and Statistics*, 91(3), 537-546. <https://doi.org/10.1162/rest.91.3.537>
7. Eisfeldt, A. L., & Papanikolaou, D. (2014). The value and ownership of Intangible Capital. *American Economic Review*, 104(5), 189-194. <https://doi.org/10.1257/aer.104.5.189>

8. Eke, C. I. (2024). Capital Structure, Corporate Tax Avoidance, and Firm Performance: A Study of Firms in the Manufacturing Sector Listed on the Nigeria Stock Exchange (Doctoral dissertation, Canterbury Christ Church University (United Kingdom)). Retrieved from <https://repository.canterbury.ac.uk/download/1be1d1215487685e9071c5b458a4e3975d6809d9cf44686f74fe450fe57b263a/2682597/EDU%20PhD-%20Feb%202025%20MAIN%20Submitted.pdf>
9. Fekadu Agmas, W. (2020). Impacts of capital structure: profitability of construction companies in Ethiopia. *Journal of Financial Management of Property and Construction*, 25(3), 371-386. DOI:10.1108/JFMPC-08-2019-0072
10. Ferriswara, D., Sayidah, N., & Agus Buniarto, E. (2022). Do corporate governance, capital structure predict financial performance and firm value?(empirical study of Jakarta Islamic index). *Cogent Business & Management*, 9(1), 2147123. <https://doi.org/10.1080/23311975.2022.2147123>
11. Firmansyah, A., Febrian, W., & Falbo, T. D. (2022). The role of corporate governance and tax risk in Indonesian investors' response to tax avoidance and tax aggressiveness. *Jurnal Riset Akuntansi Terpadu*, 15(1), 11. <https://doi.org/10.35448/jrat.v15i1.14033>
12. Francis, J. R., & Yu, M. D. (2009). Big 4 office size and Audit Quality. *The Accounting Review*, 84(5), 1521–1552. <https://doi.org/10.2308/accr.2009.84.5.1521>
13. Frank, M. Z., & Goyal, V. K. (2009). Capital structure decisions: Which factors are reliably important? *Financial Management*, 38(1), 1–37. <https://doi.org/10.1111/j.1755-053x.2009.01026.x>
14. Hakim, A. F., & Hasanatina, F. H. Unveiling Profitability Drivers: How Size, Growth, and Capital Structure Interact with Tax Avoidance. *International Research Journal of Economics and Management Studies IRJEMS*, 3(11). DOI 10.56472/25835238/IRJEMS-V3I11P120
15. Hasan, M. M., & Cheung, A. (2023). Organization capital and firm risks. *China Accounting and Finance Review*, 25(3), 338-367. <https://doi.org/10.1108/CAFR-05-2022-0044>
16. Hasan, M. M., Lobo, G. J., & Qiu, B. (2021). Organizational Capital, corporate tax avoidance, and firm value. *Journal of Corporate Finance*, 70, 102050. <https://doi.org/10.1016/j.jcorpfin.2021.102050>
17. Hovakimian, A., Kayhan, A., & Titman, S. (2011). Are Corporate Default Probabilities Consistent with the Static Tradeoff Theory? <https://doi.org/10.3386/w17290>
18. Inrawan, A., Silitonga, H. P., & Dermawan Sembiring, L. (2025). The role of firm size in moderating the relationship between profitability and firm value. *FINANCIAL: JURNAL AKUNTANSI*, 11(1), 119–132. <https://doi.org/10.37403/financial.v11i1.733>
19. Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behaviour, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360. [https://doi.org/10.1016/0304-405X\(76\)90026-X](https://doi.org/10.1016/0304-405X(76)90026-X)
20. Kraus, A., & Litzenberger, R. H. (1973). A state-preference model of optimal financial leverage. *Journal of Finance*, 28(4), 911–922. <https://doi.org/10.2307/2978343>
21. Kumar, R. (2016). Perspectives on value and valuation. *Valuation*, 3–46. <https://doi.org/10.1016/b978-0-12-802303-7.00001-2>
22. Larasati, S. D., & Betharia, C. (2024). Firm value in profitability, leverage, capital structure, and firm growth. *Jurnal Akuntansi*, 16(1), 168–182. <https://doi.org/10.28932/jam.v16i1.8537>
23. Lev, B., & Radhakrishnan, S. (2003). The Measurement of Firm-Specific Organization Capital. <https://doi.org/10.3386/w9581>
24. LEV, B., RADHAKRISHNAN, S., & ZHANG, W. (2009). Organization Capital. *Abacus*, 45(3), 275–298. <https://doi.org/10.1111/j.1467-6281.2009.00289.x>
25. Myers, S. C. (2001). Capital structure. *Journal of Economic Perspectives*, 15(2), 81–102.
26. Nguyen, H. T., & Nguyen, A. H. (2020). The impact of capital structure on firm performance: Evidence from Vietnam. *Journal of Asian Finance, Economics and Business*, 7(4), 97-105. DOI:10.13106/jafeb.2020.vol7.no4.97
27. Nielsen, L. B. (2009). The impact of outsourcing on investments in firm-specific human capital under varying contract regimes. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1533349>
28. Priyanto, P., & Aryati, T. (2023). The effect of earning management, growth opportunity, and capital structure on company value with audit quality as moderating variable. *International Journal of Economics and Business Administration*, XI, (1), 133-148. DOI:10.35808/ijeba/802
29. Putra, S. N., & Edastami, M. (2024). The effect of tax planning and leverage on firm value with firm size as a moderating variable. *Ekonomis: Journal of Economics and Business*, 8(2), 1593. <https://doi.org/10.33087/ekonomis.v8i2.2060>
30. Putri, A. A. (2024). The effect of value-added human capital, Structural Capital Value-added, value-added capital employed, and profitability on firm value with firm size as a moderating variable (study of manufacturing companies in the sub-sector pharmaceuticals listed on the Th. *International Journal of Economic, Business & Applications*, 9(1), 59–80. <https://doi.org/10.31258/ijeba.95>

31. Putri, I. G. A. P. T., & Rahyuda, H. (2020). Effect of capital structure and sales growth on firm value with profitability as mediation. *International research journal of management, IT and social sciences*, 7(1), 145-155. <https://doi.org/10.21744/irjmis.v7n1.833>
32. Rahma, A. M., Nurcahyono, N., Sinarasri, A., & Ifada, L. M. (2023, May). Moderating Effects of Institutional Ownership on the Relation Between Capital Structure and Firm Performance. In *International Conference on Business, Accounting, Banking, and Economics (ICBABE 2022)* (pp. 293-306). Atlantis Press. https://doi.org/10.2991/978-94-6463-154-8_26
33. Rahmanian Koushkaki, A. and Omrany, M., 2022. Investigating the moderating role of tax avoidance on the relationship between corporate reputation and implicit cost of capital. *Monetary & Financial Economics*, 28(22), pp.105-126. <https://doi.org/10.22067/mfe.2022.74310.1150>
34. Revi, A. I. M., & Anom, P. I. B. (2021). The effect of profitability, firm size, capital structure and tax avoidance on firm value. *Russian Journal of Agricultural and Socio-Economic Sciences*, 119(11), 31-40. <http://dx.doi.org/10.18551/rjoas.2021-11.04>
35. Rixen, T. (2010). From double tax avoidance to tax competition: Explaining the institutional trajectory of International Tax Governance. *SSRN Electronic Journal*. <https://doi.org/10.2139/ssrn.1589132>
36. Santoso, P. W., Tambunan, M. E., & Kumullah, E. R. (2020). The role of moderating audit quality relationship between corporate characteristics and financial distress in the Indonesian mining sector. *Investment Management and Financial Innovations*, 17(2), 88-100. DOI:10.21511/imfi.17(2).2020.08
37. Smithers, A. (2022). Corporate investment and the miller-modigliani theorem. *The Economics of the Stock Market*, 95–104. <https://doi.org/10.1093/oso/9780192847096.003.0019>
38. Spence, M. (1973). Job market signalling. *Quarterly Journal of Economics*, 87(3), 355–374. <https://doi.org/10.2307/1882010>
39. Tanko, U. M., Siyanbola, A. A., Bako, P. M., & Dotun, O. V. (2021). Capital structure and firm financial performance: Moderating effect of board financial literacy in Nigerian listed non-financial companies. *Journal of Accounting Research, Organization and Economics*, 4(1), 48-66. DOI:10.24815/jaroe.v4i1.18322
40. Tanui, P. J., Omare, D., & Omondi, M. A. (2021). Asset Structure, Corporate Governance, Capital Structure and Financial Performance of Construction and Manufacturing Firms Listed In Kenya. Retrieved from https://www.researchgate.net/profile/Dominic-Omare/publication/353014158_Himalayan_Economics_and_Business_Management_Asset_Structure_Corporate_Governance_Capital_Structure_and_Financial_Performance_of_Construction_and_Manufacturing_Firms_Listed_In_Kenya/links/6310d736acd814437ff527a0/Himalayan-Economics-and-Business-Management-Asset-Structure-Corporate-Governance-Capital-Structure-and-Financial-Performance-of-Construction-and-Manufacturing-Firms-Listed-In-Kenya.pdf
41. Ting, I. W. K., Tebourbi, I., Lu, W. M., & Kweh, Q. L. (2021). The effects of managerial ability on firm performance and the mediating role of capital structure: evidence from Taiwan. *Financial innovation*, 7(1), 89. <https://doi.org/10.1186/s40854-021-00320-7>
42. Uktamovich, S. (2023). Organizational and Economic Mechanism of Human Capital Formation. *Proceedings of the 2nd Pamir Transboundary Conference for Sustainable Societies*, 293–295. <https://doi.org/10.5220/0012840100003882>
43. Wibowo, J., & Trisnawati, E. (2025). Tax avoidance, financial performance and growth on firm value : Capital Structure as moderation. *SENTRALISASI*, 14(3), 1–26. <https://doi.org/10.33506/sl.v14i3.4433>
44. Widnyana, I. W., Wiksuana, I., Artini, L. G. S., & Sedana, I. B. P. (2021). Influence of financial architecture, intangible assets on financial performance and corporate value in the Indonesian capital market. *International Journal of Productivity and Performance Management*, 70(7), 1837-1864. DOI: 10.1108/IJPPM-06-2019-0307
45. Wu, S., Li, X., Du, X., & Li, Z. (2022). The impact of ESG performance on firm value: The moderating role of ownership structure. *Sustainability*, 14(21), 14507. <https://doi.org/10.3390/su142114507>