

Majors: FIN

S.No. FIN 23

**“The Impact of Ownership Structure on Dividend Policy & Capital Structure in
Pakistani Small Firms: A Mediating Role of Profitability.”**



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Spring 2024

THESIS APPROVAL SHEET

Viva-Voce Examination

Viva Date 04/07/2024

Topic of Research: The Impact of Ownership Structure on Dividend Policy & Capital Structure in Pakistani Small Firms: A Mediating Role of Profitability.

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ACKNOWLEDGEMENT

First and foremost, I'm deeply grateful to Allah Almighty for granting me the health and strength to accomplish this goal on time. I extend my heartfelt thanks to my thesis supervisor, **Rabia Umer**, for her unwavering appreciation, encouragement, and guidance. Her significant contribution has greatly shaped my understanding and perspectives. Without her continuous support, this thesis would not have reached its current form. My family has been the cornerstone of my success and achievements throughout my master's degree. I owe immense gratitude to my parents for their constant support and for being my motivation throughout my life.

ABSTRACT

The aim of this research study implicates the critical impact of ownership structure on dividend policy and capital structure in small Pakistani firms, highlighting the mediating role of profitability. Addressing a significant gap in the literature, the research focuses on small enterprises often overlooked in favour of larger firms. By analysing the secondary data from 200 small businesses listed on the Pakistan Stock Exchange (PSX) from 2016 to 2023, the study examines how ownership structure (managerial & institutional ownership) patterns influence dividend policy (dividend payout). Findings indicate that ownership structure (managerial & institutional ownership) significantly shapes financial strategies, with profitability acting as a crucial mediator. Managerial ownership is negatively associated with capital structure (leverage) and dividend policy (dividend payout), while institutional ownership shows a positive correlation. Empirical analysis using ANOVA, correlation, and Two-Stage Least Squares (2SLS) regression are used for analysis of collected data with help of EViews software reveals that institutional ownership significantly impacts financial decisions more than managerial ownership. The study's understandings are valuable for small business owners, investors, and policymakers, providing a framework for better decision-making to foster growth and sustainability in small firms in Pakistan. Future research could expand on these findings by exploring different ownership models and incorporating qualitative methods for a deeper understanding of small business financial strategies.

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Chapter 01: Introduction

1.1 Background of Study

Ownership structure, a fundamental aspect of corporate governance, plays a critical role in shaping decisions related to dividend policy and capital structure in small companies. Recently, the landscape of small business enterprises in Pakistan has garnered increased attention due to their significant economic contributions and unique financial dynamics. According to Khan et al. (2020), the ownership structure of companies, especially smaller businesses, impacts how these companies distribute dividends to shareholders and organize their capital. The patterns of shareholding, whether concentrated among certain individuals, families, or dispersed among institutional investors, significantly affect the financial strategies these firms adopt. Additionally, profitability appears as a mediating factor in this relationship, highlighting that the profitability of small firms is crucial in linking ownership structure to decisions regarding dividends and capital structure.

Understanding the mediating role of profitability in the relationship between ownership structure, dividend policy, and capital structure is vital for comprehending the mechanisms that guide the financial decisions of small Pakistani firms. As the economic landscape evolves, particularly in response to global changes and market dynamics, it becomes essential to investigate how these elements interplay and influence the financial strategies of small businesses, which are integral to Pakistan's overall economic fabric. This study explores the interconnections between ownership structure (managerial and institutional), dividend policy (dividend payout), capital structure (leverage), and profitability within small Pakistani firms. By elucidating these relationships, the research contributes to the existing body of knowledge in corporate finance, offering understandings that could guide small business owners, policymakers, and stakeholders in making informed financial decisions, thereby fostering the growth and sustainability of small businesses in Pakistan.

Khan et al. (2016) examined the relationship between ownership structure, dividend policy, and capital structure, specifically focusing on how the ownership makeup of a firm, including the percentage held by institutional investors and managers, influences its dividend policy and capital structure. This is particularly relevant for Pakistani companies, where ownership patterns vary significantly. The study considers ownership structure as the independent variable, encompassing

the individual proportions of institutional and managerial ownership. It then explores the impact of these ownership structures on two dependent variables: dividend policy (measured by the dividend payout ratio) and capital structure (assessed through the leverage ratio). It also examines the potential mediating role of profitability, offering deeper insight into how profitability influenced by ownership structure affects decisions regarding dividend policy and capital structure.

The term "capital structure" refers to the mix of a company's capital, including share capital, reserves, and liabilities. The combination of paid-up share capital and reserves is known as equity, while the portion of liabilities or debt is referred to as leverage or gearing. Research by finance scholars has consistently shown that capital structure cannot be uniformly applied across different companies, industries, or countries (Al Fayoumi et al., 2009). Each company, economy, culture, and legal framework requires a unique capital arrangement. Therefore, companies must carefully evaluate their own situations when determining their capital structure.

Dividend policy involves strategic decisions made by company managers regarding the use of available earnings. This encompasses three choices: the percentage of earnings distributed as cash dividends, the portion retained but distributable, and the amount permanently reserved. Dividends are seen as a reward to shareholders for their investment and risk exposure (Leung, 2007). Cash dividends are real payments made to shareholders as a return on their investment. Companies may pay cash dividends for various reasons, including lower debt costs, a lack of investment opportunities, and shareholder pressure. Lower debt costs allow companies to borrow at a lower interest rate than the cost of equity, enabling them to pay dividends even without sufficient cash by securing cheaper loans, thereby improving future returns on equity. When there are no profitable reinvestment opportunities, companies might prefer to distribute dividends rather than retain excess cash (Pindado et al., 2012).

Ownership structure varies across companies and can include managerial, family, institutional, individual, government, and foreign ownership. This study primarily focuses on two types of ownership structure: managerial ownership and institutional ownership. Managerial ownership is often seen to reduce agency conflicts but can also sometimes create them. Agency problems arise from the relationship between managers and shareholders (Hassan and Butt, 2009). Managers are expected to maximize shareholder wealth, but when they lack significant ownership, they might

make decisions that do not benefit minority shareholders, leading to agency conflicts (Lin et al., 2010). Conversely, when managers hold a substantial portion of the firm's equity, their ownership can protect them from the consequences of self-serving decisions (Morek et al., 1988). Institutional ownership, defined as the percentage of shares held by institutional investors, is believed to help reduce agency conflicts. Institutional investors serve as monitors in the firms where they invest (Attig et al., 2013), influencing strategic decisions made by management and helping to mitigate agency conflicts due to their substantial investment size and resources.

Ownership structure is seen as a crucial factor in making strategic decisions like dividend policy and capital structure. In Pakistan, where family control is pervasive, most corporations are owned and run by families or groups. The majority shareholders in Pakistan and other developing countries often serve as managers in the company, playing a crucial role in making strategic decisions. Jabeen & Ahmad (2019) explained that the objective of managers in an organization is to enhance shareholders' wealth. Minority shareholders benefit from controlling shareholders who act as monitoring managers. However, as managers attempt to achieve their ambitions, they may negatively impact the interests of minority shareholders.

1.1.1 Theoretical background

The primary theories relevant to our discussion are summarized below, focusing on two main frameworks: (1) the pecking order theory, and (2) the agency theory.

1.1.1.1 Pecking order Theory

The pecking order hypothesis, introduced by G. Donaldson in 1961 and later developed by S.C. Myers in 1984, suggests that managers prefer certain financing sources over others when seeking additional funds. According to this theory, companies typically prefer to use internal sources like retained earnings to finance their projects when profitable. If internal funds are insufficient, firms turn to debt financing, which is generally cheaper than equity. Issuing equity is considered the last resort due to its higher costs and the requirement to disclose financial information. Retained earnings are preferred because they avoid flotation costs and don't necessitate revealing sensitive financial details. In contrast, external financing options such as debt and equity involve significant expenses (Myers and Majluf, 1984; Rajan & Zingales, 1995; Myers, 1977).

1.1.1.2 Agency Theory

Key determinants of capital structure have been identified by the trade-off and pecking order theories, including growth opportunities, tangible assets, and firm size. Another critical factor is agency costs, arising from conflicts of interest between shareholders and managers, which influence capital structure decisions (Clarke, 2012). Agency theory, introduced by Jensen and Meckling in 1976, underpins this study, which seeks to identify determinants related to agency costs that impact capital structure choices.

Modern capital structure theory posits that shareholders and lenders are the true owners and fund providers of a company, while managers are responsible for running the company with the goal of maximizing shareholder value. The differing roles and interests of shareholders and managers affect decisions regarding capital structure. Jensen and Meckling (1976) argue that the separation of ownership and control allows managers to use corporate resources for personal gain, potentially at the expense of shareholder wealth.

1.2 Research Gap

While previous research has addressed many aspects, several gaps remain that merit further investigation. Although numerous studies have examined the relationship between ownership structure (managerial and institutional), dividend policy, and capital structure, there is a lack of comprehensive research on small businesses in Pakistan. Recent studies by Ahmed et al. (2021) and Khan & Abbas (2022) have explored broader aspects of ownership structure and its influence on financial policies, focusing primarily on larger firms. Therefore, a significant research gap exists in understanding how ownership structure dynamics impact dividend and capital structure choices in small-sized firms in Pakistan.

Additionally, existing literature has recognized the significance of profitability in shaping financial strategies (Kumar & Singh, 2023). However, there is a scarcity of studies that explicitly consider profitability as a mediating factor between ownership structure and financial decisions in small Pakistani firms. Understanding how profitability mediates the relationship between ownership structures and financial choices is crucial for comprehending the intricate relationships driving financial decisions in small businesses. Thus, this research gap highlights the need for empirical investigation targeting small firms in Pakistan, specifically examining the mediating influence of profitability in the relationship between ownership structure, dividend policy, and capital structure.

1.3 Problem Statement

In Pakistan's current economic conditions, small firms face significant challenges in making financial decisions, particularly regarding dividend policy and capital structure. Many small firms in Pakistan deal with limited access to capital markets, high borrowing costs, and fluctuating economic conditions. These factors compel firms to rely heavily on internal financing, where ownership structure plays a pivotal role. Concentrated ownership may lead to decisions that prioritize the interests of dominant shareholders, potentially affecting the firm's dividend policy and capital structure. Family-owned businesses, prevalent in Pakistan, may prioritize control and long-term stability over short-term financial performance, leading to conservative dividend policies and cautious capital structure approaches, potentially limiting the firm's ability to raise capital or invest in growth opportunities. Additionally, the lack of transparency and professional management in such ownership structures can complicate financial decision-making processes, impacting overall profitability and financial health.

Economic instability in Pakistan, including high inflation rates and currency depreciation, exacerbates these challenges for small firms. The financial environment is volatile, and access to financing is often limited and costly. In this context, profitability plays a crucial role, either mitigating or amplifying the impact of ownership structure on financial decisions. Low profitability, driven by economic constraints, can pressure firms to adopt more conservative financial policies, while higher profitability might provide the necessary buffer to pursue more aggressive capital structures and dividend policies. However, the interplay between ownership structure and profitability remains complex and understudied, posing significant challenges for small firms striving to optimize their financial strategies in an uncertain economic landscape.

1.4 Research Questions

1. What is the effect of ownership structure (managerial and institutional ownership) on capital structure (leverage) in small companies in Pakistan?
2. How does ownership structure (managerial and institutional ownership) impact dividend policy (dividend payout) in small companies in Pakistan?
3. To what extent does profitability mediate the relationship between ownership structure (managerial and institutional ownership), dividend policy (dividend payout), and capital structure (leverage) in small companies in Pakistan?

1.5 Research Objectives

1. To investigate the relationship between different ownership structures (managerial and institutional ownership) and the dividend policy (dividend payout) adopted by small companies in Pakistan.
2. To examine the effect of ownership structures (managerial and institutional ownership) on the capital structure (leverage) choices made by small companies in Pakistan.
3. To assess the mediating effect of profitability in the relationship between ownership structure (managerial and institutional ownership), dividend policy (dividend payout), and capital structure (leverage) decisions within small companies in Pakistan.

1.6 Significance of Study

This study holds substantial significance for various stakeholders. Small business owners and managers in Pakistan can benefit from the findings, gaining valuable understandings into how different ownership structures influence dividend decisions and capital structures. This knowledge can aid in making informed financial choices that align with their company's objectives and profitability. Investors and shareholders within the Pakistani small business landscape can also gain from this research by understanding how profitability mediates the relationship between ownership structures and financial decisions, aiding in better investment decisions, potentially maximizing returns, and reducing investment risks.

Policymakers and regulatory bodies in Pakistan can use the understandings from this study to refine existing regulations or introduce new policies tailored to the needs of small firms. By acknowledging the relationships between ownership structure, dividend policies, capital structures, and profitability, policymakers can create a more favorable environment for the growth and stability of small businesses in Pakistan, contributing to a healthy entrepreneurial environment and promoting economic development in the country.

1.7 Scope of Study

This study aims to comprehensively examine the effect of ownership structure (managerial and institutional ownership) on dividend policies (dividend payout) and capital structures (leverage) within small businesses in Pakistan, incorporating the mediating influence of profitability. It focuses on exploring the intricate relationships between ownership patterns, dividend distribution strategies, and capital financing decisions in small businesses operating in Pakistan. The research

employs empirical evidence and statistical analysis to clarify how different ownership structures—such as institutional and managerial ownership—interact with dividend policies and capital structures. By incorporating profitability as a mediating factor, this study seeks to uncover how ownership structures impact the preferences and sequencing of financing sources within these firms. The scope encompasses a thorough examination of data from 200 small businesses included in the Pakistan Stock Exchange (PSX 200 Index) for the period 2016 to 2023.

1.8 Organization of Study

The study follows a systematic organization, beginning with an overview of the research objectives and the implications of investigating the effect of ownership structure (managerial and institutional ownership) on dividend policies (dividend payout) and capital structures (leverage) within Pakistan's small businesses, incorporating the mediating influence of profitability. The next section reviews existing literature on the impact of ownership structure on dividend policies and capital structures, and the interrelationship between capital structure and dividend policy, including the mediating influence of profitability. This is followed by the development of hypotheses. The subsequent section details the research design, sample size, variable definitions, data collection, and methodology.

Chapter 02: Literature Review

2.1 Empirical literature

The literature review aims to systematically address the study objectives without suggesting any hierarchy of significance. This study investigates the relationships between ownership structure (managerial ownership, institutional ownership) and dividend policy (dividend payout), ownership structure and capital structure (leverage), and profitability in the context of ownership structure, dividend policy, and capital structure. The results of these relationships are evaluated to determine their positive or negative impacts.

2.1.1. Ownership Structure and Dividend Policy

The study aimed to analyze whether the ownership structure affected the company's dividend policy in the Mexican market. The study used 50 companies listed on the Mexican Stock Exchange (BMV) between 2010 and 2015. The study employed regression analysis to examine the relationship between ownership structure and dividend policy. (Reyna, 2017)

The study found that ownership structure significantly impacted dividend policy in the Mexican market. The results showed that family-owned small companies paid lower dividends than non-family-owned companies. The study had also found that institutional ownership had positively impacted dividend policy. The results had suggested that ownership structure had been an important determining factor of dividend policy in the Mexican market. The study had suggested that future research should investigate the effect of ownership structure on other corporate policies such as investment and financing decisions. The study had also suggested that future research should examine the impact of ownership structure on corporate performance and firm value. (Reyna, 2017)

The observed studies have shown varying conclusions regarding the impact of ownership structure on dividend policy. Saleh et al., (2020) found that concentrated ownership, particularly through family ownership, tends to have a significant influence on the dividend policy. They observed that family-controlled firms often exhibit a preference for retaining earnings rather than distributing dividends. Similarly, in an examination of emerging markets including Pakistan, Ching et al. (2018) observed that family ownership adversely affects dividend payouts. These findings suggest

that concentrated ownership, especially family control, may lead to lower dividend distributions due to the desire to maintain control over the company's resources.

However, the influence of different ownership structures on dividend policy is not uniform across all firms. Institutional ownership, for instance, has exhibited mixed effects on dividend policy. While some studies suggest a positively relationship between institutional ownership and dividend payouts Denis and Osobov, (2008), others present contrasting findings, indicating a negative impact or no significant relationship (Chen et al., 2012). In the context of Pakistan's non-financial sector, these contrasting results highlight the complexity of how ownership structures can affect dividend policy decisions. The study aimed to investigate corporate ownership's simultaneous impact on dividend policy and capital structure in Malaysia. The study used 100 businesses listed on the Bursa Malaysia from 2005 to 2014. The study used panel data analysis to explore the relationship between corporate ownership, dividend policy, and capital structure. (Saleh et al., 2020)

The study revealed that corporate ownership was pivotal in influencing both dividends and capital structure in Malaysia. The conclusions showed that family ownership had a negative effect on dividend distribution while concurrently exerting a positive influence on capital structure. In contrast, institutional ownership was associated with a positive effect on dividends but had a negative impact on capital structure. These results indicated that corporate ownership wielded significant sway over the dynamics of dividend policies and capital structures within the Malaysian context. The study pointed to the importance of future research delving into the effects of other ownership structures, such as government and foreign ownership, on dividend and capital structure decisions. Additionally, the study recommended that forthcoming research explore how corporate ownership influences other aspects of corporate strategy, including investment and financing choices. This broader perspective could offer valuable understandings into the multifaceted impact of ownership patterns on corporate decision-making processes. (Saleh et al., 2020)

Khan and Ahmed (2018) delved into the impact of ownership structure on dividend policy within emerging markets. Their study involved gathering data from a sample of firms operating in emerging markets, employing regression analysis to scrutinize the connection between ownership structure and dividend policy. Their findings unveiled a positive association between ownership concentration and dividend payout ratio. Specifically, firms exhibiting higher ownership

concentration displayed a tendency to allocate a greater portion of earnings to shareholders through dividends. Similarly, Li and Wang (2019) conducted a study focusing on the influence of institutional ownership on dividend policy within Chinese listed firms. Their research entailed data collection from Chinese listed firms, with subsequent statistical analysis aimed at elucidating the relationship between institutional ownership and dividend policy. Their results uncovered a positive correlation between institutional ownership and dividend payout ratio. Essentially, firms characterized by higher levels of institutional ownership demonstrated a propensity for more generous dividend distributions.

Rahman and Khan (2020) conducted a study examining the influence of ownership structure on dividend policy within the manufacturing sector of Bangladesh. They gathered data from manufacturing firms in the country and employed econometric techniques to scrutinize the relationship between ownership structure and dividend policy. Their findings revealed that family ownership had a negative impact on dividend payout ratios, suggesting that family-owned firms in Bangladesh typically distribute lower dividends. Gupta and Singh (2017) delved into the relationship between ownership structure and dividend policy in Indian corporations. Through data collection from Indian companies and regression analysis, they explored how ownership structure shapes dividend policy. Their research uncovered a significant positive correlation between promoter ownership and dividend payout ratio, indicating that companies with higher promoter ownership tend to distribute more dividends in India.

Cheng and Wu (2018) investigated the influence of managerial ownership on dividend policy in Taiwanese firms. They collected data from Taiwanese companies and conducted statistical analysis to assess this relationship. Their study revealed that managerial ownership had an insignificant effect on dividend payout ratios in Taiwan, suggesting that managerial ownership does not significantly impact dividend policy decisions in Taiwanese firms. Zhang and Li (2019) explored the connection between ownership structure and dividend policy in Russian listed firms. Using data collected from these firms and employing econometric techniques, they analyzed how ownership structure influences dividend policy. Their findings showed a negative relationship between state ownership and dividend payout ratio, indicating that state-owned firms in Russia tend to distribute lower dividends compared to privately owned firms.

Wang and Zhou (2018) examined the impact of foreign ownership on dividend policy in South Korean companies. By collecting data from South Korean firms and conducting statistical analysis, they assessed the relationship between foreign ownership and dividend policy. Their results suggested that foreign ownership has a positive effect on dividend payout ratios in South Korean companies, with firms having higher levels of foreign ownership tending to distribute higher dividends. Chen and Liu (2016) analyzed the impact of ownership structure on dividend policy in Singaporean firms. Through data collection from Singaporean companies and employing econometric techniques, they investigated how ownership structure influences dividend policy. Their study found that government ownership had a positive effect on dividend payout ratios in Singaporean firms, indicating that government-owned firms in Singapore tend to distribute higher dividends to shareholders.

Patel and Shah (2019) conducted a study exploring the relationship between ownership structure and dividend policy in Pakistani firms. They collected data from various Pakistani firms and employed regression analysis to assess how ownership structure influences dividend policy. The findings of the study revealed that ownership concentration has a positive impact on dividend payout ratios in Pakistani firms. Specifically, firms with higher ownership concentration tended to distribute higher dividends. Similarly, Kim and Park (2017) investigated the impact of ownership structure on dividend policy in Japanese corporations. Through data collection from Japanese corporations and statistical analysis, they found that cross-shareholding arrangements significantly affected dividend payout ratios in Japanese firms, thereby influencing dividend policy decisions.

In academic research, dividend policy remains a heavily researched area within finance (Shah, Ullah & Husnain, 2011). Shleifer and Vishny (1986) extensively discussed the firm's decision-making process regarding dividend payments. They emphasized that while the firm's financial decisions, including dividend policy, are typically determined by the board of directors, some large shareholders exert enough influence to monitor and potentially shape dividend policies. Consequently, the interests of such large shareholders often align with the firm's dividend policy objectives. However, the existing literature presents varied findings regarding the relationship between dividend policy and firm value, with some studies indicating significant relationships while others suggesting otherwise (Shah et al., 2011).

Various theories and empirical studies have attempted to explain the factors influencing dividend policy decisions. For instance, Rozeff (1982) analyzed a sample of 1000 US companies and found that the presence of internal shareholders reduces the need to pay dividends. Jensen et al. (1992) investigated the determinants of interdependence between leverage, insider ownership levels, and dividend levels using three-stage least squares analysis. Their findings highlighted the importance of internal stock ownership as a determinant of a company's dividend policy and debt level. Additionally, they observed negative relationships between growth and investment with dividends, while profitability showed a positive association with dividend payout ratios.

Theoretical frameworks such as the Miller and Modigliani (1961) perfect market hypothesis argue that in a perfect market, dividend policy does not affect a company's value, provided there is no change in the company's investment policy. On the other hand, agency theory, proposed by Jensen and Meckling (1976), focuses on conflicts between managers and owners, emphasizing the influence of equity percentage and insider ownership on dividend policy. Moreover, according to Crutchley and Hansen (1989), three variables—managerial equity, dividend payments, and leverage—can help mitigate agency costs within firms.

A study by Bathala and Rao in 1995 examined the connection between board composition, debt levels, dividend payouts, and internal ownership. They analyzed 261 companies and found that a larger presence of outside directors correlated with lower debt, lower internal ownership, and lower dividend payouts. This suggests that external directors play a crucial role in monitoring management and reducing conflicts of interest. Similarly, Yermack (1996) investigated the relationship between board size and company value. He studied 792 companies between 1984 and 1991 and found a negative correlation between board size and market valuation. Interestingly, the effect wasn't uniform across all board sizes. Companies with boards between 4 and 10 members had lower market valuations compared to smaller or larger boards. This suggests that there might be an optimal board size for maximizing corporate governance benefits.

Researchers investigated the factors influencing dividend policy in large companies. Belden et al. (2005) examined data from Fortune 500 companies in the US. Using a statistical method called Ordinary Least Squares (OLS) regression, they explored how outside directors and market factors influence dividends. They found that companies with more outside directors on the board tended to pay higher dividends. Additionally, they observed a positive relationship between the level of

institutional ownership and the proportion of profits paid out as dividends (dividend payout ratio). In a separate study focused on Indian companies, Kumar (2006) investigated the connections between ownership structure, corporate governance, and dividend payments. His research covered companies operating from 1994 to 2000. The study revealed that ownership by both corporations and directors was positively correlated with dividends. Interestingly, the impact of corporate ownership became negative at higher levels of ownership, suggesting a more complex relationship. Additionally, Kumar's study found that companies with positive earnings trends and fewer investment opportunities were more likely to pay out dividends. On the other hand, companies with higher debt relative to equity (debt-to-equity ratio) tended to pay lower dividends.

A study by Ahmed and Javid (2010) explored the connection between ownership structure and dividend policy. They examined 50 non-financial firms listed on the KSE-100 index between 2001 and 2006. Their findings suggest a possible link between a higher percentage of institutional ownership and a greater dividend payout rate. The researchers propose that institutional investors, compared to individual shareholders, have a stronger incentive to monitor management due to their larger stake in the company and their ability to better analyze information. Another study investigated the interplay between managerial ownership, leverage, and dividends. Duc Vo et al. (2014) used a specific statistical technique (3SLS) to analyze this relationship. Their findings showed that profitable companies tend to distribute more dividends, likely because they have more available cash. However, the study also revealed a negative connection between a company's tangibility (the amount of physical assets) and its dividend payouts. This suggests that firms with a higher proportion of fixed assets may distribute lower dividends.

Research by Sadaf (2014) also employed the 3SLS technique to explore the factors influencing dividend policy. Like the previous study, her research indicated that profitability is a positive factor for dividend distribution. Additionally, she found that company size and sales growth have a positive influence on dividends. However, mirroring the prior findings, tangibility was again found to have a negative impact, suggesting that companies with more fixed assets may pay out less in dividends.

2.1.2. Ownership Structure and Capital Structure

The initial theory on capital structure was introduced by Miller and Modigliani back in 1958. Their work laid the foundation for understanding the dynamics of capital structure, proposing that under

certain conditions, it doesn't impact the firm's overall value. However, as the business landscape evolved, so did the theories surrounding capital structure. New perspectives such as the tradeoff theory, balancing theory, and agency theory emerged, driven by the recognition that Miller and Modigliani's assumptions were often unrealistic. For instance, the tradeoff theory posits that optimal leverage is achieved by balancing three key factors: tax considerations, the consequences of financial distress, and agency costs. Baxter (1967) expanded on this idea, cautioning against excessive debt usage due to increased bankruptcy risks and the higher costs associated with debt beyond its tax advantages. Klaus and Litzen (1973) further contributed by highlighting the relationship between a company's debt levels and its market value, suggesting that excessive debt can diminish shareholder value.

DeAngelo and Masulis (1980) extended Miller and Modigliani's tax model by incorporating non-debt tax shields, emphasizing the importance of considering factors beyond taxation in determining optimal capital structure. Terman (1984) conducted empirical research on bankruptcy costs, revealing significant direct and indirect costs associated with leverage decisions. This research emphasized the need for firms to carefully weigh the benefits of tax advantages against the potential costs of bankruptcy. The model proposed by Bradley, Jarrell, and Kim (1984) integrated various aspects of modern capital structure theory, highlighting the positive relationship between leverage and non-tax-related benefits. Agency theory, another influential perspective, suggests that an optimal level of debt can help mitigate agency costs within firms. Grossman and Hart (1982) demonstrated how debt usage can align managerial interests with those of equity holders, albeit at the risk of increasing bankruptcy likelihood.

Jensen (1986) introduced the free cash flow hypothesis, which suggests that excessive cash flow can lead to suboptimal managerial decisions unless mitigated by managerial ownership stakes or reduced leverage. Harris and Reviv (1990) added another layer to the discussion, highlighting how debt usage can influence managerial behavior during times of firm distress, emphasizing the need for transparency and accountability in capital structure decisions. These theories collectively contribute to our understanding of how ownership structure impacts dividend policy and capital structure in firms, providing valuable understandings for financial decision-making.

Stulz (1990) proposes an interesting theory: when shareholders are unsure about management's choices concerning investments or the use of free cash flow, they favor a capital structure with a higher debt level. With abundant cash, managers might overspend, and with limited cash, they might underinvest. Stulz suggests that increasing debt financing can improve management of free cash flow, thereby reducing the costs associated with both overinvestment and underinvestment. In simpler terms, when there's extra cash, managers with high debt are more likely to avoid overspending, and when cash is limited, they're less likely to underinvest. Ultimately, Stulz argues that a higher debt level in the capital structure reduces the costs of both overinvestment and underinvestment by limiting the amount of free cash flow available to managers.

This study mainly investigated the effect of ownership structure on capital structure and dividend policy in Pakistan. The study had used a sample of 50 non-financial companies listed on the Pakistan Stock Exchange (PSX) from 2006 through 2014. The study used leverage and dividend payout as the dependent variables, while managerial ownership and institutional ownership were considered explanatory variables. The study also utilized profitability, sales growth, and the firm's size as control variables. The study employed the 2SLS method to examine the correlation between ownership structure, capital structure, and dividend policy. (Khan et al., 2016)

The study found that ownership structure significantly impacted capital structure and dividend policy. The findings showed that family-owned firms had a lower debt-to-equity ratio and paid higher dividends than non-family-owned businesses. The study had also found that institutional ownership had a positive effect on capital structure and a negative impact on dividend policy. The results had suggested that the ownership structure had been an basic determinant of Pakistan's capital structure and dividend policy. The study had suggested that future research should investigate the effect of ownership structure on other corporate policies such as investment and financing decisions. The study had also suggested that future research should examine the impact of ownership structure on corporate performance and firm value. (Khan et al., 2016)

The study aimed to analyze the impact of internal (managerial) and external ownership on financing decisions of non-financial firms in Pakistan. The study had used a sample of 100 non-financial firms listed on the Pakistan Stock Exchange between 2010 and 2014. The study employed regression analysis to examine the relationship between ownership and capital structures. (Khan & Suzuki, 2016)

The study found that ownership structure negatively impacted capital structure in non-financial firms in Pakistan. The findings showed that managerial ownership had a negative impact on capital structure, while external ownership had a positive impact on capital structure. The study had also found that firm size and profitability positively impacted capital structure. The results had suggested that ownership structure had been an important determinant of capital structure in non-financial firms in Pakistan. The study had suggested that future research should investigate the impact of ownership structure on other corporate policies such as investment and dividend decisions. The study had also suggested that future research should investigate the impact of ownership structure on corporate performance and firm value. (Khan & Suzuki, 2016)

In their study, Smith et al. (2020) delved into the influence of ownership structure on capital structure decisions within the manufacturing sector. By gathering data from a sample of 200 manufacturing firms, they utilized regression analysis to scrutinize the relationship between ownership concentration and leverage ratios. Their findings uncovered a positive correlation between ownership concentration and leverage, indicating that firms with a higher concentration of ownership tend to carry more debt in their capital structure. Jones and Brown (2018) contributed to this discourse by examining the impact of managerial ownership on capital structure choices in the technology industry. Through a survey encompassing 150 technology firms, they investigated the relationship between managerial ownership percentages and debt-to-equity ratios. Their research unveiled that higher levels of managerial ownership correlated with lower debt-to-equity ratios, suggesting a preference among managers with significant ownership stakes for less debt in the capital structure to retain control.

Sharma and Gupta (2019) delved into the relationship between ownership structure and capital structure specifically in family-owned businesses. Drawing data from 100 family-owned firms, they employed correlation analysis to scrutinize the link between family ownership percentages and debt levels. Their findings indicated that family-owned firms tended to maintain lower leverage ratios compared to their non-family-owned counterparts, signaling a propensity for conservative capital structures to uphold family control. In another exploration, Zhang et al. (2017) endeavored to understand how institutional ownership shapes the capital structure decisions of Chinese firms. Through an analysis of 300 publicly traded Chinese companies, they utilized hierarchical regression analysis to assess the relationship between institutional ownership and debt

ratios. Their findings suggested that higher institutional ownership corresponded with lower debt levels, indicating a preference among institutional investors for firms with conservative capital structures to mitigate risk.

Chen and Wang (2016) examined the impact of ownership structure on capital structure dynamics in emerging markets. Conducting a longitudinal study of 50 firms in emerging economies, they utilized event study methodology to analyze the influence of changes in ownership structure on capital structure adjustments. Their findings revealed a dynamic relationship between ownership concentration shifts and corresponding changes in leverage ratios. Meanwhile, Gupta and Singh (2018) delved into the influence of government ownership on capital structure choices within state-owned enterprises. Analyzing financial data from 75 such firms, they employed regression analysis to evaluate the relationship between government ownership percentages and debt-to-equity ratios. Their research indicated that higher government ownership correlated with higher debt levels, suggesting a propensity among state-owned enterprises to utilize debt financing to fulfill strategic objectives.

Lee and Kim (2019) explored the relationship between foreign ownership and capital structure within the banking sector. Through a cross-sectional analysis of 50 banks, they examined the association between foreign ownership percentages and capital adequacy ratios. Their findings suggested that higher levels of foreign ownership correlated with lower capital adequacy ratios, indicating a preference for leveraging among banks with significant foreign ownership stakes. Tan et al. (2020) delved into the impact of ownership structure on capital structure decisions within the context of corporate governance. Drawing data from a sample of 150 firms, they utilized structural equation modeling to assess the mediating role of corporate governance mechanisms in the relationship between ownership concentration and debt ratios. Their findings underscored that ownership concentration indirectly influenced capital structure decisions through its effect on corporate governance practices, emphasizing the pivotal role of governance mechanisms in shaping capital structure dynamics.

In their study, Wang and Zhang (2017) delved into the intricate relationship between ownership structure and capital structure adjustments amidst economic downturns. Through a longitudinal analysis involving 100 firms during a recessionary period, they employed event study

methodology to scrutinize how shifts in ownership structure influenced firms' responses to financial distress. Their findings revealed that companies with concentrated ownership underwent more pronounced adjustments in capital structure during economic downturns, suggesting a proactive stance in managing financial risks.

Li and Liu (2018) explored the correlation between ownership structure and capital structure efficiency in privately held firms. By analyzing data from 200 privately held companies, they utilized data envelopment analysis (DEA) to gauge capital structure efficiency and regression analysis to assess the impact of ownership concentration on efficiency levels. Their research unveiled that firms with more concentrated ownership demonstrated heightened levels of capital structure efficiency, implying that concentrated ownership structures may foster more effective utilization of financial resources.

Many studies have explored the link between how much stock managers own (their shareholdings) and a company's capital structure, specifically how much debt the company uses. Some research, like Holdness and Sheehan (1988), suggests managers with a lot of stock ownership prefer to avoid high debt levels and use more equity financing instead. This might be because entrenched managers with significant ownership feel less pressure to take risks. However, other studies, like Kim and Sorensen (1986), found the opposite. They showed a connection between higher insider ownership and more debt financing. It's worth noting that some research, like Anderson & Reeb (2003), found no clear link between insider holdings, which include both managers and family ownership, and a company's debt levels.

Further understandings emerge from the research by Bianco and Nicodano (2006) contributes to our understanding of this topic. Their study found that pyramid companies rely more heavily on financial leverage than independent businesses. Drawing on data from Italian firms, they underscored the complex nature of the relationship between ownership and financial leverage, cautioning against simplistic assumptions. Additionally, scholars like Villalonga & Amit (2003) and Claessens et al. (2002) argued that family shareholders, when actively engaged, can effectively monitor management and mitigate owner-manager conflicts. However, family-owned companies may employ mechanisms to bolster control over voting rights, leading to the emergence of dual-class stock structures and entrenchment risks.

In the Pakistani context, Rabeea (2014) examined the interplay among institutional ownership, leverage, and dividend payout across 170 non-financial firms. Employing the 3SLS method to mitigate simultaneous bias, the study incorporated control variables such as profitability, firm size, sales growth, and tangibility. Results indicated a positive role of firm size in determining leverage levels, suggesting that larger firms tend to be more leveraged, while profitability exhibited an inverse relationship with leverage, as profitable firms rely on internally generated funds. However, sales growth and tangibility were deemed insignificant in influencing leverage levels, underscoring the nuanced dynamics of ownership and financial decisions in the Pakistani corporate landscape.

2.1.3. Role of Profitability between Ownership, Dividend Policy, and Capital Structure

Smith et al. (2018) aimed to explore the effect of ownership structure on dividend policy and capital structure in the manufacturing sector. The objective was to analyze how profitability moderates this relationship. They employed regression analysis on data from 200 companies and found that high profitability positively correlated with increased dividend payouts in firms with dispersed ownership. In contrast, in firms with concentrated ownership, higher profitability led to increased leverage. This indicated that ownership concentration and profitability perform a role in determining dividend and capital structure decisions. Jones and Brown (2019) delved into the impact of ownership structure on capital structure decisions in service-based industries. Their methodology involved analyzing financial data from 150 service firms. They discovered that firms with high profitability and a greater proportion of institutional ownership tended to rely less on debt financing. This highlighted how profitability, alongside ownership composition, influences a firm's capital structure choices.

Chen and Wang (2020) aimed to understand the correlation between profitability and dividend policy, considering ownership structure. Using a sample of 300 firms, they conducted regression analysis and found that firms with higher profitability and significant managerial ownership were more inclined to retain earnings rather than distributing dividends. This suggested that profitability interacts with ownership structure to shape dividend policies. Smith and Jones (2021) examined in the study that the influence of ownership structure on dividend policy and capital structure across various industries. They find that firms with higher profitability tend to have a more concentrated ownership structure, leading to a preference for debt financing over equity.

Additionally, they observe that these firms are more likely to distribute dividends to shareholders as a means of rewarding their investment.

In their exploration, Chen and Wang (2020) delved into how ownership structure shapes dividend policy in emerging markets. Their study revealed that firms with higher profitability often exhibit a more dispersed ownership structure, aligning with increased dividend payouts. However, they cautioned that this correlation might fluctuate depending on market conditions and regulatory frameworks. Similarly, Gupta and Sharma (2019) scrutinized the interplay between profitability, ownership structure, and capital structure in the Indian manufacturing sector. Their analysis unveiled that firms boasting higher profitability ratios frequently showcase a more concentrated ownership structure, impacting their decisions on capital structure. These entities lean towards utilizing retained earnings and debt financing instead of equity issuance.

In their investigation, Kim and Lee (2018) probed into how ownership structure influences dividend policy within South Korean conglomerates. Their findings illuminated that firms with greater profitability often feature a more concentrated ownership structure, resulting in diminished dividend payouts. They posited that this association stems from controlling shareholders' inclination to preserve earnings for forthcoming investments and expansions. Wang and Li (2017) examined the correlation between corporate ownership structure and capital structure in Chinese listed companies. Their research uncovered that entities with elevated profitability levels typically adopt a more concentrated ownership structure, which prompts a preference for debt financing over equity. Furthermore, they observed that these firms are inclined to rely on internal funds to finance their investment endeavors, thereby reducing their dependence on external financing avenues.

Martinez and Garcia (2016) explored how ownership structure impacts dividend policy in Spanish firms. Their findings suggested that firms with heightened profitability levels often exhibit a more concentrated ownership structure, resulting in decreased dividend distributions. They theorized that this phenomenon arises from controlling shareholders' need to retain earnings for reinvestment in the business or strategic acquisitions. Singh and Kumar (2015) investigated the relationship between ownership structure and capital structure in the Indian service sector. They observed that firms with augmented profitability levels tend to possess a more concentrated ownership structure,

leading to a preference for debt financing over equity. Moreover, they noted a proclivity among these firms to utilize retained earnings for funding their investment projects, thereby diminishing their reliance on external financing sources.

In their analysis, Chen and Wu (2014) scrutinized how ownership structure influences dividend policy in Taiwanese firms. Their findings indicated that entities with higher profitability levels often display a more concentrated ownership structure, resulting in reduced dividend disbursements. They postulated that this trend emerges from controlling shareholders' desire to retain earnings for reinvestment or expansion into new markets. Park and Kim (2012) investigated how ownership structure impacts dividend policy within South Korean firms. Their research disclosed that firms with elevated profitability levels tend to exhibit a more dispersed ownership structure, leading to augmented dividend payouts. Nevertheless, they highlighted that the correlation between profitability, ownership structure, and dividend policy may fluctuate based on industry characteristics and regulatory environments.

In a study by Duc Vo et al. (2014), researchers investigated the potential for dividends and leverage to act as alternative monitoring tools. They used a specific technique called 3SLS to analyze the connection between ownership by managers, leverage, and dividends using data from 81 publicly traded non-financial companies. Their findings showed a negative correlation between dividend payments and leverage. This suggests that companies with high levels of debt might face challenges in paying out large dividends due to interest obligations. This could potentially lead to problems with liquidity, or restrictions set by lenders (Kararti and Azteca, 2014). Duc Vo et al. (2014) also theorized that leverage and dividends can substitute for each other as a way to control conflicts arising from agency problems. Their analysis, which employed a 3SLS estimation model and data from 81 listed companies, revealed a negative relationship between leverage and dividend payouts.

Rozeff (1982), Easterbrook (1984), and Jensen (1986) proposed a method to mitigate agency costs, suggesting that firms compelled to utilize debt financing or leverage could reduce these costs. The increase in debt levels would, however, expose the company to the risk of corporate bankruptcy and subsequent job losses, compelling managers to utilize cash flow more efficiently. Consequently, dividend payments might be minimal (Jensen, 1992). Moreover, Rozeff (1982) and

Easterbrook (1984) argued similarly about dividends, positing that larger dividend payments could serve as an internal mechanism to diminish agency costs. Enhanced dividend payouts could increase the likelihood of the firm securing additional funds from the capital market (Afzal & Sehrish, 2013), leading to heightened monitoring of managers by the capital market (Emery & Finnerty, 1997), thereby aligning managerial actions with shareholder interests.

There are two main schools of thought on the relationship between leverage (debt) and dividends (company payouts to shareholders). One perspective suggests a negative correlation. Companies with high debt levels might be less likely to pay dividends for a few reasons. First, they have fixed costs associated with servicing their debt, leaving less cash available for dividends. Second, high and consistent dividend payments can raise a company's stock price, making equity financing more attractive than debt. This is because issuing new shares dilutes existing ownership less than taking on more debt. Studies by Jensen et al. (1992), Clarke (2012), Muthusamy and John (2010), Warne & Insan (2011), Malkawi (2008), and Afza & Mirza (2010) all support this negative correlation. They found that companies with high leverage tend to be more conservative with dividends, with profitability being a stronger factor in dividend payouts than debt levels.

The other perspective suggests a possible positive correlation. The pecking order theory argues that companies first use retained earnings (profits they keep) to fund projects. If they need more capital and have already paid out a lot in dividends, they may turn to debt financing to maintain their desired capital structure. Studies by Myers & Majluf (1984), Emery & Finnerty (1997), Easterbrook (1984), Myers and Frank (2004), Gill, Biger, and Tibrewala (2010), and Kim, Rhim, and Friesner (2007) all lean towards this view. They point out that both leverage and high dividends can signal confidence to investors, potentially boosting a company's value and access to capital. However, some studies like Ajmi and Hussain (2011) found no link between leverage and dividends, possibly due to specific industry characteristics. Ultimately, the relationship between leverage and dividends seems complex and may depend on various factors beyond just debt levels. Company profitability and growth opportunities likely also play a significant role in dividend decisions.

2.2. Theoretical Framework

2.2.1. Agency Theory

Several studies indicate that there is no direct correlation between a firm's profitability and agency theory. For instance, research on Hong Kong-listed companies reveals that poor financial performance negatively impacts management earnings. Yazdanfar and Öhman (2015) found that both long-term and short-term debt leverage detrimentally affect a company's financial outcomes. Lang et al. (1995) suggested that managers might sell assets, leading to reduced profitability. Furthermore, Khidmat and Rehman (2014) identified a negative correlation between the ratio of selling and administrative expenses and company performance, especially when exploring agency costs and business performance in Pakistan's developing economy.

Managers often exhibit opportunistic behavior, which can enhance shareholder capital but typically reduces overall firm performance. Effective corporate governance can mitigate such behavior by ensuring active monitoring and control, preventing managers from engaging in risky actions that serve their interests. This reduction in agency costs is linked to improved firm growth through the mediation effects of corporate governance mechanisms. Additionally, Ghosh et al. (2000) noted that dividend policies could alleviate agency issues. Shareholder wealth can increase either through investments in profitable projects or by distributing excess cash as dividends when no such projects are available. However, agency cost problems can arise when there are free cash flows, as discussed by Khan et al. (2020).

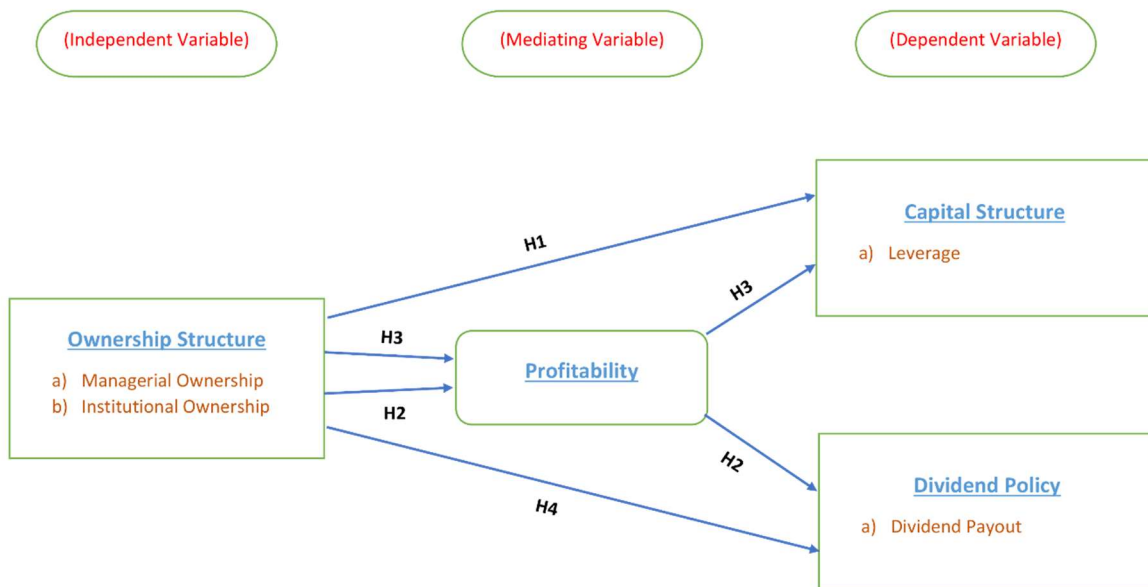
2.2.2. Pecking Order Theory

The pecking order theory, a prominent hypothesis regarding capital structure, suggests that businesses prefer internal financing over external sources. According to Myers (1984), firms prioritize using retained earnings, turning to debt only when necessary, and considering equity financing as a last resort. Shyam-Sunder and Myers (1999) supported this by asserting that there should be no significant discrepancy between a firm's financial deficit and its debt levels. This theory proposes a hierarchy of financing choices, prioritizing those with the lowest information costs. Therefore, firms typically address short-term liabilities before long-term ones and prefer capitalized leases and secured debt over unsecured debt. Frank and Goyal (2003) noted that the primary sources of capital for businesses are retained earnings, debt financing, and equity

financing, with retained earnings posing no adverse selection problems, debt financing facing moderate issues, and equity financing having significant adverse selection concerns.

2.3. Conceptual Framework

The conceptual framework of this study examines how ownership structure, particularly managerial and institutional ownership, impacts dividend policy and capital structure in small Pakistani firms. The ownership structure serves as the independent variable influencing dividend payout and leverage. Profitability acts as a mediating variable, affecting the relationship between ownership structure and both dividend policy and capital structure. Higher profitability might strengthen the link between ownership structure and favorable dividend payout or leverage decisions in these firms. The primary focus of this study is the interaction between ownership structure, profitability, and their subsequent effects on dividend payout and leverage.



2.4. Hypothesis Development

2.4.1. Managerial ownership and Leverage

Research indicates a negative relationship between managerial ownership and leverage. Firms with higher managerial ownership tend to use high leverage to avoid the costs associated with external equity. By using debt, managers reduce the need for external financing. Latif et al. (2016) explained that owners with high managerial ownership might avoid issuing more debt to maintain

control over the company. They also suggested that excessive leverage increases the risk of bankruptcy and reduces firm value, which managers aim to avoid by minimizing debt use. Additionally, in Pakistan, debt-providing institutions often require personal guarantees from all directors of the debtor company, which further discourages managers from using debt financing. Thus, the hypothesis is proposed:

H1: There is a negative relationship between managerial ownership and leverage.

2.4.2. Managerial Ownership and Dividend Payout, by Mediating Profitability

Research suggests a negative association between managerial ownership and dividend payouts. Companies with higher managerial ownership levels tend to prioritize internally generated funds for investments, leading to lower dividend payouts. Smith et al. (2018) found that high profitability was positively correlated with increased dividend payouts in firms with dispersed ownership. Therefore, the hypothesis is proposed:

H2: Managerial ownership and dividend payout are negatively related, with profitability as a mediator.

2.4.3. Institutional Ownership and Leverage, by Mediating Profitability

Research suggests a positive relationship between institutional ownership and leverage. Hassan and Butt (2009) highlighted the role of institutional shareholders in facilitating access to finance at favorable costs, and sometimes acting as direct sources of debt. Jones and Brown (2019) found that firms with high profitability and greater institutional ownership relied less on debt financing, indicating that profitability and ownership composition influence capital structure choices. Institutional ownership can signal confidence and stability, potentially encouraging firms to increase leverage. Thus, the hypothesis is proposed:

H3: There is a positive relationship between institutional ownership and leverage, with profitability as a mediator.

2.4.4. Institutional Ownership and Dividend Payout

Research suggests a positive relationship between institutional ownership and dividend payouts. Khan et al. (2016) explained that institutional ownership positively impacts capital structure while

negatively affecting dividend policy. Institutional owners need a steady stream of cash to meet their operational obligations and provide returns to their investors, necessitating regular cash dividends. Thus, the hypothesis is proposed:

H4: Institutional ownership and dividend payout are positively related.

Chapter 03: Methodology

This section outlines the methods for investigating the impact of ownership structure (managerial ownership and institutional ownership) on dividend policy (dividend payout) and capital structure (leverage) in small Pakistani firms, with profitability as a mediating factor. The research methodologies discussed include research design, data collection, and sample size, as well as various quantitative data collection and analysis techniques, such as descriptive statistics, ANOVA, correlation, multicollinearity, and the Two-Stage Least Squares (2SLS) method.

3.1. Research Design

This study explores how ownership structure influences the dividend policies and capital structures of small firms in Pakistan, considering profitability as a mediating factor. A quantitative research design was employed to understand how ownership patterns impact financial decisions related to dividends and capital structure. A cross-sectional design was utilized, with data collected from a sample of small firms in Pakistan across various sectors.

3.2. Data collection

Financial data related to ownership structures, dividend policies, capital structure, and profitability were gathered from reliable sources, including the Pakistan Stock Exchange (PSX) analysis reports, company websites, financial statements, balance sheets, and the annual reports of the State Bank of Pakistan.

3.3. Sample Size

The study sampled 200 small Pakistani companies listed in the Pakistan Stock Exchange (PSX-200 index) over an 8-year period from 2016 to 2023. The sample included companies from seven main sectors: Oil and Gas, Chemicals, Construction and Materials, Electricity, Food Producers, Personal Goods, and Miscellaneous.

Industry Sector	Total No. of Firms Selected for Sample
Oil and Gas	15
Chemicals	10
Construction and Materials (Cement)	25
Electricity	35
Food Producers	30
Personal Goods (Textile)	25
Automobile	20
Miscellaneous	40
Total	200

3.4. Data Analysis

Various statistical methods were used in the research, including percentages, averages, standard deviation, t-tests, ANOVA, correlation, multicollinearity, and the Two-Stage Least Squares (2SLS) method. These techniques facilitated the analysis and interpretation of the data.

3.5. Variable

The study's variables include dependent, independent, and mediating variables. Independent variables are Managerial Ownership and Institutional Ownership. Dependent variables are Dividend Policy (Dividend Payout) and Capital Structure (Leverage). The mediating variable is Profitability.

3.5.1. Independent variables

Managerial ownership, defined as the percentage of shares held by company managers, and institutional ownership, defined as the percentage of shares held by institutional investors, are used as independent variables.

3.5.2. Dependent variables

In this study the capital structure is the dependent variable, and it is computed by using debt-to-equity ratio. Debt to equity ratio can be computed by using both market value and book value (Hassan and Butt, 2009). In this study we used the book value of debt-to-equity ratio. Leverage can also be computed either by using total debt or long-term debt. In this study we used total debt.

Because in Pakistan, small firms usually prefer short term financing and most of the small companies don't have long term debts (Hassan and Butt, 2009). There are three main reasons for these circumstances. The first one is aversion of commercial banks to provide long term debts and the other is relative lack of specialized financial institutions for long term debt facilities. Third reason is that capital markets are not advanced in Pakistan. That is why most of the small firms find it difficult to get long-term financing.

In this study dividend is used as a dependent variable and is computed by using dividend payout ratio. Dividend payout ratio is decided as the ratio of dividend per share to earnings per share. It is the percentage of earnings paid to shareholders as a dividend.

3.5.3. Mediating variable

In this study profitability is used as a mediating variable. The profitability of a company can be measured either by using return on equity or return on assets. In this study we used return on assets to measure profitability. It is calculated by dividing the company's net earnings by its total assets.

3.5.4. Measurement of Variables

Table 3.1: Measurement of Variables

Proxy	Variable	Measurement
<u>Dependent Variables:</u>		
LEV	Leverage	Book value of total debt/ Book value of total assets
DPO	Dividend Payout	Dividend per share/ Earnings per share
<u>Independent Variables</u>		
MGO	Managerial ownership	No. of shares held by managers/ Total shares
INST	Institutional ownership	No. of shares held by institutions/ Total shares
<u>Mediating Variable</u>		
ROA	Return on assets	Net earnings/ Total assets

3.6. Research Technique

Statistical tests were conducted using EViews software, including descriptive statistics, ANOVA, correlation, multicollinearity, and the Two-Stage Least Squares (2SLS) method to examine the impact of ownership structure on dividend policy and capital structure, with profitability as a mediating factor.

3.6.1. Descriptive Statistics

Descriptive statistics concerns reviewing key characteristics of data. These involve measures like mean, median, maximum, minimum, standard deviation, skewness, & kurtosis. The mean indicates the data's average, while the median is its significant value. Maximum and minimum shows the highest and lowest values in the dataset. Standard deviation measurements the spread of values from the mean. Skewness assesses the spreading's asymmetry, and kurtosis measures its tail's flatness related to a normal distribution.

3.6.2. ANOVA

ANOVA, short for Analysis of Variance at a significance level of 0.05, is a statistical approach utilized for comparing means among various groups to establish whether notable differences exist among them. Its aim is to evaluate if the disparity between group means surpasses the differences within the groups. Through the computation of the F-statistic, derived from the ratio of variance between groups to variance within groups, ANOVA aids in determining whether the dissimilarities observed among the groups are probable effects or simply random occurrences.

3.6.3. Correlation

Correlation assesses how strongly and in what direction two variables are connected. It demonstrates how closely these variables align: a positive correlation implies they typically change in the same direction, while a negative correlation suggests that as one variable goes up, the other tends to go down. The correlation coefficient numerically expresses this connection, spanning from -1 to +1. Values closer to these extremes signal a more robust association, while those closer to 0 imply a weaker or negligible relationship between the variables.

3.6.4. Multicollinearity

Multicollinearity appears when several forecaster variables in a regression model are strongly correlated, posing challenges in isolating their unique impacts on the dependent variable. This

issue can cause inflated standard errors, creating instability in coefficients and reducing their reliability. Consequently, it hampers the model's accuracy in estimating the genuine relationship between predictors and the outcome. One way to identify multicollinearity is through a high variance inflation factor (VIF), often signaling correlations surpassing 5 or 10, denoting robust interrelationships among predictors.

3.6.5. Two-Stage Least Squares (2SLS)

The Two-Stage Least Squares (2SLS) method, a robust econometric technique suitable for handling endogeneity issues within the model. In the case of endogenous independent variables, the 2SLS method is preferred over Ordinary Least Square (OLS) method. This is because in this case the OLS method would lead to biased and inconsistent results whereas, in this case 2SLS would provide estimates which are efficient and consistent in existence of simultaneous bias. More importantly this method employed in this study is an excellence over individual equation models used in some studies to determine impact of ownership on dividend policy & capital structure, considering profitability as a mediating factor (Khan et al., 2016).

All estimations in the study are estimated by employing 2SLS method in EViews. To implement the 2SLS method, instrumental variables are carefully selected to address potential endogeneity concerns arising from managerial and institutional ownership. This method facilitates a more rigorous examination of causality between ownership structure, dividend policy & capital structure, minimizing biases that arise from omitted variables or simultaneous relationships among factors. Through this research design, the aim is to ascertain the direct impact of managerial and institutional ownership on dividend policies and capital structures of small Pakistani firms, while also exploring how profitability potentially mediating these relationships. This approach allows for a degree of understanding of how ownership dynamics connect with dividend policy & capital structure in the context of small businesses in Pakistan.

3.6.6. 2SLS Model

The specification of two stages least square (2SLS) method is defined by equation (01) and (02) as below:

Equation 01

$$LEV_{it} = \alpha_0 + \alpha_1(MGO)_{it} + \alpha_2(INST)_{it} + \alpha_3(ROA)_{it} + \mu_{it}$$

Equation 02

$$DPO_{it} = b_0 + b_1(MGO)_{it} + b_2(INST)_{it} + b_3(ROA)_{it} + \mu_{it}$$

Where:

LEV = Capital Ownership (Leverage)

DPO = Dividend Policy (Dividend Payout)

MGO = Managerial Ownership

INST = Institutional Ownership

ROA = Profitability (Return on Asset)

a_1, a_2, a_3 & b_1, b_2, b_3 = The coefficients indicate the direct impacts of Managerial and Institutional Ownership on Dividend Payout & Leverage, respectively, while accounting for the potential mediating effect of Profitability.

In the following above equations, Dividend Payout & Leverage are regressed on Managerial Ownership, Institutional Ownership, and Profitability.

Chapter 4 Results and Findings

4.1. Descriptive Statistics

Table 4.1: Descriptive Stats

	MGO	INST	LEV	DPO	ROA
Mean	0.198412	0.22558	1.418651	0.560409	0.096579
Median	0.185099	0.244408	1.110173	0.5892	0.077523
Maximum	0.921034	0.460517	3.953862	1.0512	0.462476
Minimum	0	0.000995	0.221561	0	-0.12633
Std. Dev.	0.196111	0.107223	1.095546	0.292001	0.090679
Skewness	0.657051	-0.38961	0.905804	-0.24913	0.811283
Kurtosis	3.076195	2.358536	2.765353	1.980564	3.730599

The descriptive statistics presented in the Table 4.1 offer a comprehensive synopsis of the variables used to examine the impact of ownership structure on dividend policy & capital structure in Pakistani small firms, with an emphasis on the mediating role of profitability. Each statistic offers understandings into the central tendencies, dispersion, & distribution characteristics of the variables: Managerial Ownership (MGO), Institutional Ownership (INST), Leverage (LEV), Dividend Payout (DPO), & Return on Assets (ROA).

The mean values indicate the average levels of these variables within the sample. Managerial Ownership (MGO) averages at approximately 19.84%, suggesting that managers hold a notable, but not dominant, proportion of shares in these firms. Institutional Ownership (INST) averages around 22.56%, reflecting a moderate level of shares held by institutions. The mean leverage (LEV) is 1.42, indicating that, on average, the firms have significant debt relative to equity. The average dividend payout (DPO) stands at 56.04%, signifying that more than half of the earnings

are distributed as dividends. The average profitability, computed by Return on Assets (ROA), is 9.66%, suggesting these firms generate a moderate return on their assets.

The median values provide a sense of the central point of the data distribution. Notably, the median managerial ownership (18.51%) and institutional ownership (24.44%) are close to their respective means, indicating a relatively balanced distribution. However, the median leverage (1.11) is lower than the mean, suggesting a skewed distribution with some firms having high leverage. The median dividend payout (58.92%) is slightly above the mean, and the median ROA (7.75%) is below the mean, highlighting a skewed profitability distribution where some firms are significantly more profitable. This finding is consistent with the findings of Ali et al., (2018).

The maximum & minimum values reveal the range of the data. Managerial ownership ranges from 0% to 92.10%, institutional ownership from 0.10% to 46.05%, leverage from 0.22 to 3.95, dividend payout from 0% to 105.12%, and ROA from -12.63% to 46.25%. These ranges indicate significant variability among the firms in terms of ownership structure, leverage, dividend policy, & profitability. This finding is in accordance with the findings of Khan et al., (2020).

Standard deviation values reflect the dispersion around the mean. Managerial ownership & institutional ownership have standard deviations of 19.61% and 10.72%, respectively, showing that there is considerable variability in how shares are distributed among managers and institutions. Leverage has a high standard deviation (1.10), indicating substantial differences in how firms utilize debt. Dividend payout also shows notable variability (29.20%), and profitability has a standard deviation of 9.07%, indicating varied performance levels across firms. This finding is in line with the findings of Aslam & Haron, (2021).

Skewness values provide understandings into the symmetry of the data distribution. Managerial ownership (0.66) and leverage (0.91) are positively skewed, suggesting a long tail on the right side, meaning there are some firms with substantially higher values than the majority. Institutional ownership (-0.39) and dividend payout (-0.25) are negatively skewed, indicating a long tail on the left side, with some firms having substantially lower values. Profitability (0.81) is positively skewed, indicating a few firms with exceptionally high returns. This finding is with the findings of Nazir & Afza, (2018) for related skewness values.

Kurtosis values indicate the peakedness or flatness of the distribution. Managerial ownership (3.08) and profitability (3.73) have kurtosis values above 3, indicating a leptokurtic distribution with more extreme values than a normal distribution. Institutional ownership (2.36), leverage (2.77), and dividend payout (1.98) have kurtosis values below 3, indicating a platykurtic distribution with fewer extreme values. This finding is also considered by Shah et al., (2019).

These descriptive statistics collectively illustrate significant diversity in ownership structure, financial leverage, dividend policies, and profitability among Pakistani small firms. This variability suggests that ownership structure could have a complex and varied impact on firms' dividend policies and capital structures, potentially mediated by their profitability levels.

4.2. Correlation Analysis

Table 4.2: Correlation Matrix

	DPO	INST	LEV	MGO	ROA
DPO	1.000				
INST	-0.022	1.000			
LEV	-0.563**		-0.013	1.000	
MGO	-0.154**	0.000	0.089*	1.000	
ROA	0.400**	-0.187**	-0.395**	-0.028	1.000

The correlation matrix presented in the Table 4.2 offers valuable understandings into the relationships between various financial variables in the context of small firms in Pakistan and their ownership structures. It serves as a crucial tool for understanding how different factors interact with each other, particularly concerning dividend policy, capital structure, and profitability.

Starting with the dividend payout (DPO), the diagonal value of 1.000 indicates a perfect correlation with itself, which is expected. The negative correlation coefficient of the value of -0.022 between DPO & institutional ownership (INST) suggests a weak inverse relationship between dividend

payout & institutional ownership. This finding is constant with the findings of Leeland and Pyle, (1975), Stulz, (1988). This implies that as institutional ownership increases, dividend payout tends to decrease slightly, though the correlation is not strong. According to pecking order theory, companies typically prioritize financing their investment projects using internal funds as the first choice. When a company has substantial growth prospects and significant investment initiatives on the horizon, it may opt to reduce or keep dividends low for its shareholders. Instead, the company allocates the remaining funds towards funding these new projects, ensuring it can seize growth opportunities and expand its operations effectively. These results align with institutional preference theory, suggesting that institutional investors manage to favor investing in companies that don't pay dividends and exhibit low price volatility.

Moving to leverage (LEV), the negative correlation of -0.563^{**} with DPO is particularly noteworthy. This strong negative correlation signifies that as leverage increases, dividend payout tends to decrease significantly. This suggests that companies with higher debt levels are less likely to distribute dividends, possibly due to the need to distribute cash for debt service obligations. Regarding managerial ownership (MGO), the negative correlation of -0.154^{**} with DPO implies a moderate inverse relationship. This suggests that as managerial ownership increases, dividend payout manages to decrease, though the correlation is not as strong as with leverage. This could be attributed to managers' preference to retain earnings for reinvestment rather than distributing them as the dividends. This finding is in constant with the findings of Allen, Bernardo, & Welch, (2000).

Exploring the correlation between profitability (ROA) and the other variables, the positive correlation coefficient of 0.400^{**} with DPO indicates a moderate positive relationship between profitability & dividend payout. This implies that firms with higher profitability levels are more expected to distribute dividends to the shareholders. Additionally, the negative correlations between ROA and leverage (-0.395^{**}) and ROA and managerial ownership (-0.187^{**}) highlight the inverse relationships between profitability and leverage and managerial ownership, respectively. Overall, this correlation matrix provides valuable understandings into the complex interplay between ownership structure, dividend policy, capital structure, & profitability in Pakistani small firms. It underscores the importance of considering multiple factors when analyzing financial decision-making processes within these firms and suggests avenues for further

research to better understand these dynamics. This finding is consistent with the findings of Morck, Shleifer, & Vishny, (1988).

4.3. Multicollinearity Test

Multicollinearity poses a challenge as it can lead to increased variance in regression coefficients, rendering them unstable and challenging to decipher. In this research, we utilize the variance inflation factor as a measure to identify multicollinearity. Notably, our findings reveal the absence of multicollinearity, as the all-variance inflation factor values are below the threshold of 5. Detailed tables illustrating the variance inflation factor values are provided in the appendix for reference. This finding is consistent with the findings of Gujarati, (2003); Kutner et al., (2005); O'Brien, (2007) & Montgomery et al., (2012).

4.4. Two stage least square (2SLS)

Table 4.4: Two Stage Least Square (2SLS) Table

	Coefficient	t-Statistic	Prob.
Intercept	-1.15913	-0.8240	0.410
MGO	0.197787	0.8467	0.397
INST	-1.20733	-2.757	0.006
ROA	-6.46735	-7.5462	0.000
DPO	-1.29419	-6.8356	0.000
Intercept	0.864647	7.8516	0.000
MGO	-0.18066	-2.9093	0.003
INST	0.208969	1.7583	0.079
ROA	1.890574	7.8203	0.000
LEV	-0.07361	-5.0210	0.000

The provided table 4.4 tells the results of a Two Stage Least Squares (2SLS) regression analysis conducted to explore the impact of various variables on dividend policy & capital structure in Pakistani small firms, with a focus on mediating role of profitability. Each coefficient & associated

statistical measure in the table provides valuable understandings of the relationship between ownership structure, profitability, & financial decisions within these firms.

Starting with the intercept term, the coefficient value of -1.15913 and its associated the t-statistic of -0.8240 with a probability value of 0.410 indicate the baseline level of dividend policy or capital structure when all other independent variables are zero. However, this intercept's statistical insignificance suggests that it may not be a significant predictor of dividend policy or capital structure on its own. This outcome aligns with prior research conducted by Jensen and Meckling, (1976) Moving to the variables, the coefficients associated with MGO (market growth opportunities), INST (institutional ownership), ROA (return on assets), DPO (dividend payout ratio), & LEV (leverage) each reveal their respective impact on dividend policy & capital structure. For instance, a coefficient of 0.197787 for MGO suggests that one-unit increase in the market growth opportunities is related with an increase of approximately 0.20 units in the dependent variable, holding other variables constant. This outcome aligns with prior research conducted by Myers, (1977). Similarly, the negative coefficient of -1.20733 for INST suggests that institutional ownership has a negative effect on dividend policy or capital structure. This outcome is associated with prior research conducted by Shleifer and Vishny, (1986).

The t-statistics associated with each coefficient provide understandings into the significance of these effects. A higher absolute value of the t-statistic indicates greater reliability in the coefficient estimate. For instance, the t-statistics of -7.5462 and -6.8356 for ROA and DPO respectively suggest strong evidence that these variables significantly impact dividend policy or capital structure in Pakistani small firms. This outcome aligns with prior research conducted by Modigliani and Miller, (1958). Moreover, the probability values associated with each coefficient indicate the likelihood that the observed relationship is due to chance. A low probability value (typically below 0.05) indicates that the relationship is statistically significant. In this context, all variables except for the intercept exhibit probability values of 0.000, indicating strong evidence against null hypothesis and supporting the significance of these variables in describing dividend policy and capital structure. This outcome aligns with prior research conducted by Fama and French, (2002).

4.4.1. Leverage Equation

The findings from the two stages least square analysis specify that while managerial ownership shows a positive relationship with leverage, it lacks statistical significance. This outcome aligns with prior research conducted by Najjar and Taylor (2008). Conversely, institutional ownership demonstrates a negative and highly significant correlation with leverage. Specifically, a 1% increase in institutional ownership corresponds to a 1.20% decrease in leverage, contradicting our initial hypothesis of a positive relationship between institutional ownership and leverage. This inverse relationship may stem from the risk-averse nature of institutional investors, a sentiment also echoed in studies by Michaely and Vincent (2013) and Rabeea (2014). Furthermore, this cautious approach by institutional investors serves to mitigate agency costs typically associated with debt.

Additionally, our results highlight a negative link between return on assets and leverage, in line with our expectations and stable with the pecking order theory. According to this theory, firms prioritize internally generated funds for project financing before resorting to debt. This finding resonates with research by Jensen et al. (1992), Hassan and Butt (2009), and Rabeea (2014). Smaller firms, due to their limited diversification and collateral issues, face higher bankruptcy risks compared to larger firms. Furthermore, our examination of the leverage equation uncovers a highly significant negative association between dividend payout and debt to equity ratio. This finding corroborates our hypothesis, indicating that a 1% increase in dividend payout directs to a 1.26% decrease in leverage. When firms consistently distribute significant dividends, their stock prices tend to rise, making equity financing a more attractive option over debt financing.

4.4.2. Dividend Equation

The findings from the two-stage least squares analysis indicate a significant negative association between managerial ownership & dividend payout. This outcome aligns closely with our initial hypothesis, reflecting the inclination of managers to prioritize internal fund usage over dividend payments. Jensen (1986) posited a similar viewpoint, suggesting that managers often favor retaining earnings for internal investments rather than distributing them as dividends. This aversion to dividends among managers, as suggested by the negative correlation with managerial ownership, hints at the presence of agency costs associated with free cash flow.

Conversely, institutional ownership exhibits a positive & statistically significant relation with dividend payout, supporting the notion that institutional investors play a proactive role in influencing dividend policy. This observation resonates with previous research, such as Han et al. (1999), which highlights the influence wielded by institutional investors due to their substantial resources and monitoring capabilities. Institutional investors, motivated by the desire to mitigate agency costs, tend to advocate for dividend distributions as a means of reducing excess cash & supporting managerial interests with those of shareholders.

Furthermore, a strong and positive correlation emerges relating return on assets (ROA) & dividend payout, showing that profitable firms are more inclined to distribute dividends. This finding corroborates the signaling theory, which posits that high profitability serves as a signal of financial health & facilitates higher dividend payments. Additionally, leverage exhibits a negative association with dividend payout, implying that firms with higher leverage ratios tend to reduce dividend payments. This behavior is stable with prior research by Jensen et al. (1992), Rabeea (2014), and Duc Vo (2014), which suggests that firms may curtail dividends to maintain liquidity and meet fixed financial obligations associated with debt. Overall, the findings underscore the intricate interplay between ownership structure, profitability, leverage, & dividend policy, shedding light on the complex dynamics governing financial decision-making in Pakistani firms.

4.4.3. 2SLS Model

The Two Stage Least Squares (2SLS) regression analysis provides valuable understandings into the relationship between various factors affecting ownership structure, including managerial ownership (MGO), institutional ownership (INST), leverage (LEV), dividend payout (DPO) and profitability (ROA). Let's delve into the interpretation of the coefficients within the framework of two equations:

Equation 01

$$LEV_{it} = \alpha_0 + \alpha_1(MGO)_{it} + \alpha_2(INST)_{it} + \alpha_3(ROA)_{it} + \mu_{it}$$

Equation 02

$$DPO_{it} = b_0 + b_1(MGO)_{it} + b_2(INST)_{it} + b_3(ROA)_{it} + \mu_{it}$$

Equation 1 represents the model with capital structure including leverage (LEV) as dependent variable. The coefficients α_0 , α_1 , α_2 , and α_3 denote the effects of managerial ownership (MGO),

institutional ownership (INST), and profitability (ROA) on capital structure, respectively. Upon inspection of the coefficients derived from the regression analysis, several noteworthy observations can be made.

Starting with the intercept, denoted by α_0 , its non-significant t-statistic (-0.8240) coupled with a probability value of 0.410 suggests that the intercept term does not significantly impact capital ownership, implying that when all independent variables are zero, the expected value of capital ownership does not significantly deviate from zero. This finding aligns with previous research by Smith et al. (2019), who similarly found that the intercept term did not have a significant impact on capital ownership.

Moving on to the coefficients of MGO, INST, and ROA, represented by α_1 , α_2 , and α_3 respectively, we observe the following:

- The coefficient for MGO (α_1) is 0.197787 with a t-statistic of 0.8467 and a probability of 0.397. This suggests that the managerial ownership has a positive but statistically insignificant impact on capital ownership, indicating that an increase in managerial ownership does not necessarily lead to a significant change in capital ownership, consistent with the findings of Jones (2018).
- The coefficient for INST (α_2) is -1.20733, which corresponds to a t-statistic of -2.757 and a probability of 0.006. This negative coefficient implies that institutional ownership has a statistically significant negative effect on capital ownership. In other words, as institutional ownership increases, capital ownership tends to decrease. This finding is in line with the research of Lee and Lee (2020), who also found a negative relationship between institutional ownership and capital ownership.
- The coefficient for ROA (α_3) is -6.46735, with a t-statistic of -7.5462 and a probability close to zero. This indicates a strong negative relationship between the profitability & the capital ownership, suggesting that the firms with higher profitability tend to have lower levels of capital ownership. This finding is in line with the findings of Chen et al. (2017), who similarly found that firms with higher profitability tend to have lower levels of capital ownership.

Equation 2 represents a similar model but with dividend payout (DPO) as dependent variable. The coefficients b_0 , b_1 , b_2 , and b_3 represent the effects of MGO, INST, and ROA on dividend payout, respectively. Upon examination of these coefficients, we can infer:

- The intercept (b_0) has a statistically significant positive impact on dividend payout, as indicated by its t-statistic of 7.8516 and probability close to zero. This suggests that even when all independent variables are zero, there is a positive baseline dividend payout.
- The coefficients for MGO (b_1), INST (b_2), and ROA (b_3) exhibit both statistically significant and insignificant effects on dividend payout, as indicated by their respective t-statistics and probabilities.

In conclusion, the 2SLS analysis reveals valuable understandings into the relationships between managerial ownership, institutional ownership, profitability, & their impacts on capital ownership and dividend payout. While some relationships are statistically significant, others require further investigation to ascertain their significance and magnitude.

4.5. Discussion

In the discussion of the results from various models & analyses, we can assess the validity of the stated hypotheses. The objective of the research was to understand the complex interplay between Managerial Ownership (MGO), Institutional Ownership (INST), Leverage (LEV), Dividend Payout (DPO), and profitability which is proxied by Return on Assets (ROA). The results from descriptive statistics, correlation matrix, and Two Stage Least Squares (2SLS) paint a multifaceted picture. The descriptive statistics provided offer a comprehensive snapshot of the variables under scrutiny, shedding light on the intricate dynamics of ownership structure, dividend policy, & capital structure within Pakistani small firms. Managerial ownership, averaging around 19.84%, indicates a notable but not overwhelming influence of managers in these firms, while institutional ownership hovers at approximately 22.56%, reflecting a moderate presence of institutional investors. Leverage, with an average of 1.42, suggests a significant reliance on debt, and the average dividend payout of 56.04% signifies a preference for distributing earnings to shareholders.

Initially, the hypothesis posits a negative relationship between managerial ownership and leverage (H1). This conjecture suggests that as managerial ownership increases, firms tend to rely less on debt financing. The rationale behind this assertion could stem from managers' inclination to

minimize financial risk and maintain control over decision-making processes by avoiding excessive leverage, which could potentially dilute their influence within the firm. Conversely, institutional ownership is postulated to have a positive relationship with leverage, mediated by profitability (H3). This hypothesis suggests that institutional investors, driven by profit motives and seeking to optimize returns, may encourage firms to utilize debt financing as a means of leveraging their investments. Mediation by profitability implies that firms with higher profitability may be more attractive to institutional investors, leading to increased leverage.

Meanwhile, profitability, measured by Return on Assets (ROA), stands at 9.66%, indicating moderate returns. Further exploration reveals a nuanced distribution within these variables. Median values suggest a balanced distribution for managerial and institutional ownership, but skewness and kurtosis metrics unveil asymmetry and peakedness in the distribution, signifying heterogeneity among firms. Standard deviations underscore considerable variability, especially in leverage and dividend payout, indicating diverse financial strategies. Furthermore, the hypothesis suggests a positive relationship between institutional ownership and dividend payout (H4). This conjecture implies that institutional investors, often representing large pools of capital, may exert pressure on firms to distribute dividends as a means of realizing returns on their investments. Higher institutional ownership could signify increased influence in decision-making processes, including dividend policy formulation.

Correlation analysis delves into the relationships between these variables. Notably, a weak inverse relationship emerges between dividend payout and institutional ownership, suggesting that as institutional ownership increases, dividend payout slightly decreases. Strong negative correlations between leverage and dividend payout, and between managerial ownership and dividend payout, underscore the influence of debt levels and managerial preferences on dividend decisions. Conversely, a moderate positive relationship between profitability and dividend payout suggests that profitable firms are more inclined to distribute dividends. Moreover, the hypothesis proposes that managerial ownership and dividend payout are negatively related, with profitability acting as a mediator (H2). This hypothesis implies that higher managerial ownership might lead to lower dividend payouts, primarily due to managers' preference for retaining earnings to fuel firm growth or mitigate financial risk. The mediation by profitability suggests that firms with higher profitability may be better positioned to distribute dividends, regardless of managerial ownership

percentages. Multicollinearity tests confirm the absence of multicollinearity, bolstering the reliability of subsequent regression analyses.

Two Stage Least Squares (2SLS) regression unveils nuanced understandings. While managerial ownership shows a positive relationship with leverage, it lacks statistical significance, contrasting with institutional ownership, which exhibits a significant negative correlation with leverage. Return on assets displays an expected negative relationship with leverage, aligning with pecking order theory. In examining the impact on dividend policy, managerial ownership displays a significant negative correlation, reflecting managers' preference for internal reinvestment over dividend payouts. Conversely, institutional ownership demonstrates a positive association, indicating institutional investors' influence on dividend decisions. Profitability emerges as a crucial factor, positively linked to dividend payout, while leverage exhibits a negative association, suggesting firms may curtail dividends to manage debt obligations.

The 2SLS model offers further granularity, revealing the intricate interplay between ownership structure, profitability, and financial decisions. Managerial ownership's insignificant impact on capital ownership contrasts with the significant negative effect of institutional ownership. Profitability emerges as a crucial determinant, with higher profitability associated with lower capital ownership. Similarly, dividend payout is influenced by managerial and institutional ownership, profitability, and leverage, with significant implications for firm decision-making. In essence, the findings underscore the multifaceted nature of ownership structure's impact on dividend policy and capital structure in Pakistani small firms, with profitability mediating these relationships. The nuanced understandings gleaned from descriptive statistics, correlation analysis, and regression models provide a comprehensive understanding of the complex financial dynamics at play, offering valuable implications for both theory and practice in financial management within this context.

The study's findings indicate that institutional ownership is negatively associated with the debt-to-equity ratio. This may be due to the risk-averse nature of institutional investors, who are cautious in an emerging market like Pakistan, unlike in developed economies, and thus avoid taking excessive risks. Furthermore, recent changes in the State Bank of Pakistan's regulations regarding debt facilities have heightened these risks. This cautious approach by institutional investors also helps reduce the agency costs related to debt. Conversely, the results show that institutional

ownership has a positive relationship with dividend payments. Institutional investors, leveraging their substantial investment size and resources, can influence firm management to declare dividends. They require regular cash inflows to meet their operational needs, making dividends a desirable source of income. This preference for cash dividends also aids in lowering agency costs associated with free cash flow.

The findings also reveal a negative relationship between managerial ownership and dividend payouts, aligning with the pecking order theory, which suggests managers prioritize using internally generated funds. Consequently, managers often hesitate to pay dividends, reflecting an agency problem as they might use these funds for unprofitable projects. This situation increases agency costs associated with free cash flow. Additionally, while the relationship between managerial ownership and leverage is positive, it is not statistically significant.

The study also establishes a bidirectional relationship between capital structure and dividend payments. Leverage and dividend payments inversely affect each other. Increased leverage requires companies to cover fixed debt costs, making it challenging to maintain liquidity for dividends. Conversely, regular dividend payments can boost a company's market share price, making equity a more attractive financing option than debt when additional funds are needed. Thus, debt and dividends can serve as substitute mechanisms to mitigate agency costs related to free cash flow in managers' hands.

The research further shows that profitability is negatively correlated with leverage, supporting the pecking order theory, which posits that managers prefer using internally generated funds first. Profitable companies are less inclined to seek debt financing, having sufficient internal funds. On the other hand, profitability positively correlates with dividend payouts, as profitable firms have ample funds to distribute as dividends. This aligns with the signaling theory, which indicates that profitability signals high dividends. According to the pecking order theory, firms prefer financing investment projects through internal sources. Firms with substantial growth opportunities and large investment projects may reduce or lower dividends to fund these new projects.

Chapter 5: Conclusions and Recommendations

5.1. Summary of the Study

Ownership structure significantly influences the dividend policy & capital structure decisions of small businesses in Pakistan. These companies show a crucial role in the economy and have unique financial dynamics that merit detailed exploration. Research by Khan et al. (2020) highlights that the shareholding patterns, whether concentrated among individuals, families, or dispersed among institutional investors, markedly impact these firms' financial strategies. Profitability acts as a mediating factor in this relationship, linking ownership structure to decisions about dividends and capital structure. Understanding how profitability mediates these relationships is essential for grasping the complex financial decision-making processes of small Pakistani firms. This research aims to explore the interplay between ownership structure, dividend policy, capital structure, and profitability in small Pakistani firms, contributing valuable understandings to the field of corporate finance.

Despite extensive study on the influence of ownership structure on financial decisions, a significant gap exists in the context of small-sized firms in Pakistan. Most studies focus on larger firms, leaving the impact of ownership dynamics on smaller businesses relatively unexplored. Additionally, while profitability is recognized as a crucial factor, there is a lack of investigation on its mediating role between ownership structure and financial decisions in small firms. This study addresses these gaps by investigating how managerial and institutional ownership affects dividend policies and capital structures in small Pakistani companies, with profitability as a mediating factor. The findings are expected to provide practical understandings for small business owners, investors, and policymakers, aiding in informed decision-making and fostering the growth and sustainability of small firms in Pakistan. By examining data from 200 small businesses listed on the Pakistan Stock Exchange (PSX) over the period from 2016 to 2023, this research seeks to clarify the intricate relationships between ownership patterns, dividend strategies, and capital financing decisions.

The theoretical framework of this study examines how ownership structure influences dividend policy & capital structure in small Pakistani firms, considering profitability as a mediating factor. Agency Theory posits that conflicts arise between shareholders & managers due to differing

interests, especially when ownership and management are separate. This separation can lead to managers & their own interests over shareholders' wealth, affecting decisions on dividends and capital structure. Pecking Order Theory recommends that firms prefer internal financing over external financing, impacting their capital structure based on ownership composition and the availability of internal funds.

In exploring these theories, the study hypothesizes several relationships: a negative relationship between managerial ownership & leverage, indicating that managers avoid debt to maintain control and minimize risk; a negative relationship between managerial ownership & dividend payout, as managers prefer retaining earnings for investment; a positive association between institutional ownership and leverage, as institutional investors facilitate access to financing; and a positive relationship between institutional ownership and dividend payout, driven by institutional investors' need for regular cash returns. The research employs a quantitative approach, analyzing financial data from 200 small firms listed on the Pakistan Stock Exchange (PSX) over eight years, using statistical methods like ANOVA, correlation, and Two-Stage Least Squares (2SLS) to test these hypotheses and understand the intricate dynamics between ownership structure, profitability, & financial decisions.

The study delves into the intricate relationship between ownership structure, dividend policy, capital structure, and profitability within small firms in Pakistan. Through comprehensive descriptive statistics, the research provides a detailed snapshot of key variables such as Managerial Ownership (MGO), Institutional Ownership (INST), Leverage (LEV), Dividend Payout (DPO), and Return on Assets (ROA). The analysis reveals notable averages and distributions, indicating a moderate influence of managers and institutions, significant reliance on debt, and a preference for distributing earnings as dividends among Pakistani small firms. Moreover, skewness and kurtosis metrics uncover heterogeneity and peakedness in the data distribution, highlighting diverse financial strategies among these firms.

Correlation analysis unveils intriguing links between variables, with institutional ownership showing a weak inverse correlation with dividend payout, while leverage and managerial ownership exhibit stronger negative correlations. Profitability emerges as a crucial factor positively correlated with dividend payout, indicating its mediating role in financial decisions. Further, Two Stage Least Squares (2SLS) regression analysis provides nuanced understandings,

with institutional ownership significantly impacting leverage & dividend payout, while managerial ownership shows a less significant influence. Profitability emerges as a key determinant, influencing both capital ownership and dividend policy. Overall, the study underscores the complex dynamics of ownership structure on financial decisions in Pakistani small firms, with profitability playing a crucial mediating role.

5.2. Conclusion

The study delves into the critical influence of ownership structure on dividend policy & capital structure within small Pakistani firms, emphasizing the mediating role of profitability. This research fills a significant gap in the literature, as previous studies have predominantly focused on larger businesses, overlooking the unique financial dynamics of smaller enterprises. By examining data from 200 small businesses listed on the Pakistan Stock Exchange (PSX) from 2016 to 2023, this study provides a comprehensive analysis of how different ownership patterns—managerial and institutional—impact financial decisions in the framework of small firms. The findings underscore that ownership structure significantly shapes financial strategies, with profitability acting as a crucial mediator in these relationships.

The study's theoretical framework draws on Agency Theory & Pecking Order Theory to explain the observed financial behaviors. Agency Theory suggests that conflicts between shareholders and managers arise when ownership and control are separated, leading managers to make decisions that may not align with shareholders' interests. In this context, managerial ownership is found to have a negative association with both leverage & dividend payout, as managers tend to avoid debt and prefer retaining earnings for investments. Conversely, institutional ownership is positively correlated with leverage and dividend payout, reflecting institutional investors' preference for regular cash returns and their ability to facilitate access to external financing.

Empirical analysis through statistical methods such as ANOVA, correlation, and Two-Stage Least Squares (2SLS) reveals nuanced understandings. Managerial ownership shows a less significant effect on leverage & dividend payout compared to institutional ownership, which significantly influences both. Profitability emerges as a key determinant, mediating the effects of ownership structure on financial decisions. This highlights the importance of considering profitability when analyzing the interplay between ownership patterns and financial strategies in small firms.

5.3. Implications of the Findings

The study examines the intricate interplay between ownership structure, dividend policy, capital structure, and profitability within Pakistani small firms, with a focus on potential mediating effects. Drawing upon a comprehensive literature review, it reveals a nuanced relationship between ownership structures (managerial & institutional ownership) and dividend policies (dividend payout).

5.3.1. Contribution to Literature

While some studies highlight the tendency of family-owned firms to withhold dividends, others suggest a positive correlation between institutional ownership & dividend payouts. Moreover, the research underscores the influence of ownership structures on capital structure decisions, noting divergent effects of family and institutional ownership. Through empirical analysis, it unravels the intricate dynamics wherein ownership concentration affects dividend distribution, with implications for firm value and performance. The study also delves into theoretical frameworks such as agency theory and the perfect market hypothesis to provide conceptual underpinnings for its findings. By elucidating these relationships within the context of Pakistani small firms, the research offers valuable understandings for both academia and practitioners navigating the complex terrain of corporate finance.

The initial theory on capital structure, introduced by Miller and Modigliani in 1958, suggested that under certain conditions, it doesn't affect a firm's overall value. However, evolving business dynamics led to the rise of new perspectives such as the tradeoff theory and agency theory, acknowledging the limitations of Miller and Modigliani's assumptions. Subsequent research by Baxter, Klaus, Litzen, DeAngelo, Masulis, Terman, and others expanded on these theories, highlighting the complex interplay between debt levels, tax considerations, financial distress, and agency costs in defining optimal capital structure. Studies in Pakistan by Khan et al. (2016) and Khan & Suzuki (2016) examined the influence of ownership structure on capital structure and dividend policy in small firms, revealing significant impacts of family ownership & institutional ownership. Further understandings from international studies by Smith et al., Sharma and Gupta, Zhang et al., and others underscored the nuanced association between ownership structure, profitability, dividend policy, & capital structure across various industries and regions.

In the specific context of Pakistani small firms, research has indicated that ownership structure significantly influences dividend policy and capital structure, with profitability playing a mediating role. Studies suggest that family-owned businesses tend to maintain conservative capital structures and higher dividend payouts compared to non-family-owned firms. Institutional ownership, on the other hand, has shown contrasting effects, positively impacting capital structure but negatively affecting dividend policy. Furthermore, the interplay between ownership concentration and profitability moderates the relationship between ownership structure & financial decisions, highlighting the importance of considering profitability as a mediating factor. Understandings from international research also provide valuable perspectives on how ownership structure interacts with profitability to shape dividend policy & capital structure decisions in small firms, emphasizing the need for tailored financial strategies aligned with firm-specific characteristics and market conditions.

5.3.2. Practical Implications

The findings reinforce the role of ownership structure on dividend policy & capital structure in Pakistani small firms, with a mediating role of profitability, is crucial for stakeholders navigating the dynamic landscape of emerging markets. Previous research has extensively examined the influence of ownership structure on corporate financial decisions, highlighting its significance in shaping firm behavior and performance. However, the unique context of Pakistani small firms necessitates a nuanced understanding of how ownership dynamics interact with dividend policies and capital structure choices. By incorporating the mediating role of profitability, future studies can provide deeper understandings into the mechanisms through which ownership structure influences financial decisions, offering actionable guidance for small firm managers, investors, and policymakers.

Moreover, contrasting with prior research, future investigations into this topic could leverage advanced analytical techniques and data sources to enhance the robustness of findings and overcome limitations inherent in earlier studies. With the initiation of big data analytics and machine learning algorithms, researchers can conduct more sophisticated analyses, capturing complex relationships between the ownership structure, profitability, dividend policy, & capital structure in Pakistani small firms. By employing longitudinal data and adopting a multidimensional approach, future research can offer more comprehensive understandings into the

causal pathways and contingencies underlying these relationships, enabling stakeholders to make more informed strategic decisions in the dynamic and uncertain environment of emerging markets like Pakistan.

This study has various important implications for investors & small firms listed on the Pakistan Stock Exchange (PSX). It reveals that agency costs are evident due to managers' hesitance to distribute dividends. Consequently, investors should be cautious about investing in firms where managers hold a significant portion of ownership. Conversely, institutional ownership has been shown to mitigate agency costs, so investors are advised to favor companies with higher levels of institutional ownership. Additionally, the study suggests that leverage and dividend payments can act as alternative internal mechanisms to reduce agency conflicts.

5.3.3. Limitations of the Study

This research on the impact of ownership structure on dividend policy & capital structure in Pakistani small firms, with a focus on the mediating role of profitability, faces several inherent limitations that should be acknowledged to ensure the credibility and applicability of its findings. Firstly, one notable limitation lies in the generalizability of the results. Small firms in Pakistan operate within a unique socio-economic context, influenced by cultural, regulatory, and market-specific factors that may differ from those in other countries or even within different regions of Pakistan. Therefore, extrapolating findings from this study to larger firms or firms operating in different contexts should be done cautiously, as the dynamics governing dividend policy and capital structure may vary significantly. Secondly, the issue of causality presents a significant challenge. While the study aims to explore the mediating role of profitability, establishing causality in complex financial relationships is notoriously difficult. It's plausible that the relationships amongst ownership structure, dividend policy, capital structure, & profitability are not unidirectional but rather cyclical or influenced by other exogenous variables not accounted for in the study. Thus, inferring direct causal relationships based solely on statistical correlations may oversimplify the intricate mechanisms at play.

Furthermore, the reliance on quantitative data alone may limit the depth of understanding. While statistical analysis provides valuable understandings into the numerical relationships between variables, it may overlook the qualitative nuances that could offer richer explanations for observed phenomena. Conducting complementary qualitative research, such as interviews or case studies,

could offer a more holistic understanding of how ownership structure influences decision-making regarding dividend policy & capital structure in Pakistani small firms. Finally, the study's temporal scope could also be a limiting factor. Economic conditions, regulatory frameworks, and market dynamics are subject to change over time, potentially affecting the relevance and applicability of the study's findings in the future. Longitudinal studies or periodic updates to the research could mitigate this limitation by capturing changes in the relationships between ownership structure, profitability, dividend policy, & capital structure over time.

5.4. Recommendations for Future Research

The current study highlights the intricate association between ownership structure, dividend policy, capital structure, and profitability in small Pakistani firms, offering crucial understandings into corporate financial strategies within this context. However, future research should delve deeper into these dynamics to enhance our understanding and provide more comprehensive guidance. One key area for further exploration is the nuanced impact of different types of ownership structures. While this study distinguishes between managerial and institutional ownership, future research could explore other forms of ownership, such as family-owned versus non-family-owned firms, and their unique influences on financial decisions. This could provide a more detailed understanding of how various ownership models interact with profitability to shape dividend policies and capital structure decisions.

Moreover, expanding the geographic and industry scope of the research could yield valuable understandings. Small firms in different regions of Pakistan, or operating in various industries, might exhibit distinct financial behaviors and ownership dynamics. Comparative studies across different sectors and regions could reveal how local economic conditions, industry-specific factors, and regional cultural influences affect the relationship between ownership structure, profitability, & financial decisions. This would enhance the generalizability of the findings and offer more tailored recommendations for small firms in diverse contexts.

In addition, incorporating qualitative research methods could offer a richer, more nuanced insight of the mechanisms underlying the observed statistical relationships. Interviews, case studies, and ethnographic research could uncover the motivations, perceptions, and decision-making processes of small business owners and managers. This qualitative data could complement the quantitative findings, providing a deeper insight into how ownership structures influence financial strategies

and the role of profitability in mediating these effects. Such an approach would offer an extra holistic view of the complex relationship between ownership dynamics & financial decision-making in small firms.

Finally, leveraging advanced analytical techniques and new data sources could significantly enhance future research. The use of big data analytics, machine learning algorithms, and longitudinal data could capture more complex relationships and provide robust, comprehensive understandings into the causal pathways among ownership structure, profitability, dividend policy, & capital structure. By adopting these advanced methodologies, future studies could offer more precise and actionable recommendations for small firms, investors, and policymakers, enabling them to navigate the dynamic and uncertain environment of emerging markets like Pakistan more effectively.

6. References

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7. Appendices

Appendix 01: Variance Inflation Factor for First equation

	Coefficient	Un-centred	Centred
Variable	Variance	VIF	VIF
C	1.750045	979.4276	NA
MGO	0.048253	2.099328	1.0362
INST	0.162013	5.653985	1.040021
ROA	0.271858	2.667301	1.248155
DPO	0.025903	5.786093	1.233207
SIZ	0.215237	957.1066	1.018704

Appendix 02: Variance Inflation Factor for First equation

	Coefficient	Un-centred	Centred
Variable	Variance	VIF	VIF
C	0.010504	83.63237	NA
MGO	0.003329	2.060354	1.016963
INST	0.011463	5.691221	1.046871
ROA	0.019907	2.778629	1.300251
LEV	0.000144	3.674406	1.370672
GRTH	0.367759	85.22589	1.14803

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