MILITARY DIRECTORS AND FIRM PERFORMANCE: A STUDY OF LISTED FIRMS AT PAKISTANI STOCK MARKET



By

Rifat Wali PIDE2021FMPHILEAF03

Supervisor Dr. Ahmad Fraz

MPhil Economics and Finance
PIDE School of Economics
Pakistan Institute of Development Economics,
Islamabad 2024

CERTIFICATE

This is to certify that this thesis entitled: "Military Directors and Firm Performance: A Study of Listed Firms at Pakistani Stock Market". submitted by Ms. Rifat Wali is accepted in its present form by the School of Economics, Pakistan Institute of Development Economics (PIDE), Islamabad as satisfying the requirements for partial fulfilment of the degree in Master of Philosophy in Economics and Finance.

Supervisor:

Dr. Ahmed Fraz

Signature:

20

Internal Examiner:

Dr. Sobia Rose

Signature:

External Examiner:

Dr. Sumayya Fatima Chughtai, Signature:

Head,

PIDE School of Economics: Dr. Shujaat Farooq

Signature:

Examination Date: April 26, 2024

Author's Declaration

I <u>Rifat Wali</u> hereby state that my MPhil Study titled "MILITARY DIRECTORS AND FIRM PERFORMANCE" (A STUDY OF LISTED FIRMS AT PAKISTANI STOCK MARKET)

Is my own work and has not been submitted previously by me for taking any degree from this University Pakistan Institute of Development Economics or anywhere else in the country/world.

At any time if my statement is found to be incorrect even after my Graduation the university has the right to withdraw my MPhil degree.

Date: 26-04-2024

Signature of Student: ______.

Name of Student: <u>Wi Fat wall</u>

Dedication

I dedicate this Research to my beloved parents, have been a great source of inspiration and support; their love encouraged me at every step-in life and particularly during my studies at PIDE. I dedicate my little effort to my brothers and sister whose love, trust, and prayers are unforgettable for me.

(Rifat Wali)

ACKNOWLEDGEMENTS

Throughout the writing of this dissertation, I have received a great deal of support and assistance. I would like to thank Allah Almighty for giving me the strength, knowledge, ability, and opportunity to undertake and complete this research study successfully. Without his blessings, this achievement would have not been possible.

I am very grateful to my Supervisor Dr Ahmed Fraz who supervised this dissertation and was a source of inspiration for me. He always encouraged me to set goals and to find my own ways to achieve them. His inspiring suggestions, conscious guidance, and superb planning encouraged me in the completion of this Study. This research could not have been done without kindness, support, and guidance.

I am obliged to all my teachers and staff of PIDE, for helping me through their incredible skills and knowledge in preparation and processing of this Research Work.

In addition, I would like to thank my parents for their wise counsel and sympathy. They are always there for me. Finally, I could not have completed this dissertation without the support of my friends and fellows, who provided stimulating discussions as well as happy distractions to rest my mind outside of my research.

ABSTRACT

Corporate governance has become important for the successful operation of an organization in today's globalized and competitive corporate environment. In periods of crisis, boards are expected to do more than merely oversee management. Companies with a high proportion of independent directors tend to have better financial performance. The objectives of this study are to examine the impact of military directors on firm Performance. 2nd objective is to investigate the moderating role of military directors and firm size in explaining firm performance. The 3rd objective of this Evaluate the opinion of decision-makers on the role of directors in firm performance. The mixed method approach was utilized in this research primary data through questionnaire was gathered from 10 military director firms and 10 nonmilitary directors' firms, secondary data was obtaining from the official website of the 30 military and 30 nonmilitary director organization from 2011 to 2022 of their annual financial reports. The results and findings of this study there are 483 directors (66.16%) are classified as "Non-Military". However, 247 directors (33.84%) are identified as "Military," designating those who have served in the armed forces. The results imply that military directors should exercise prudence in their leadership responsibilities since they have a considerable detrimental influence on the profitability of their companies. Businesses without military directors may do better financially, highlighting the complex link between military board membership and different business results. To fully investigate the underlying dynamics and ramifications of these disparities, further investigation is required. In the conclusion the detrimental effect on Return on Assets (ROA) emphasizes how crucial it is for leaders to take commercial acumen into account. The diversity on corporate boards is shown by the distribution of directors, the majority of whom are not in the armed forces. Businesses with non-military directors have the potential to do better financially. The results provide insightful information on corporate governance procedures and urge further investigation to fully understand the underlying dynamics.

Key words: military directors, corporate governance, business leadership, financial performance, propensity score matching, organizational traits, board composition, governance structures, Pakistani stock market, decision-making processes.

СНАРТЕ	ER 1	9
INTROD	DUCTION	9
1.1	Introduction	9
1.2	Problem Statement	12
1.3	Research objective	12
1.4	Research Questions	13
СНАРТЕ	ER 2	14
REVIEW	V OF LITERATURE	14
2.1.	Introduction	14
2.2.	Relevant Review of literature	14
2.3.	Comparative analyses of other type of directors	19
2.4.	Military directors and firm performance	
2.5.	Control Variable	20
2.6.	Macroeconomic Variables	22
2.7.	Theoretical background	23
2.8.	Agency Theory	
2.9.	Resources dependency theory	
2.10.	Literature gap	26
2.11.	Significance of study	27
СНАРТЕ	ER 3	29
DATA A	ND METHODOLOGY	29
СНАРТЕ	ER 4	40
RESULT	TS AND DISCUSSION	40
СНАРТЕ	ER 5	63
DISCUS	SION	64
СНАРТЕ	ER 6	71
CONCLU	USION AND RECOMMENDATIONS	71
6.1. Conc	clusion	71
Dafarana		74

Table 1: Variable Description and measurement	36
Table 2: Descriptive statistic	40
Table 3: Correlation Matrix	42
Table 4: Multi-collinearity (VIF) test	43
Table 5: Hausman Test	45
Table 6: Random effect regression	46
Table 7: Distribution of Directors	49
Table 8: Effect of military board on corporate outcomes	51
Table 9: With Difference	53
Table 10: Propensity score matching analysis	54

LIST of ABBREVIATIONS

ROA Return on Asset
MD Military directors
WD Women directors

BS Board Size
FA Firm Age
SGROW Sales growth
LVE Leverage

GDP Gross domestic product

IR Interest rate
IF Inflation rate

PSX Pakistan stock exchange

CHAPTER 1

INTRODUCTION

1.1 Introduction

Corporate governance has become important for the successful operation of an organization in today's globalized and competitive corporate environment. In periods of crisis, boards are expected to do more than merely oversee management. They are also mandatory to provide strategic direction (Finegold et al., 2007). The board is responsible for assisting the improvements to achieve the company's objectives (Madaan et al., 2022). The effectiveness of board monitoring can be impacted significantly by the variety of board characteristics (Goldman et al., 2009). The existing literature reports different factors that increase firm value which include different types of directors CEOs (Fahlenbrach et al., 2008), bankers (Slomka-Golebiowska, 2014), politically connected directors (Goldman et al., 2009)academic directors (White et al., 2014)and female directors (Terjesen et al., 2009).

Companies with a high proportion of independent directors tend to have better financial performance. Boards with a higher proportion of women directors tend to have better decision-making processes. Having diverse perspectives and experiences can enhance the quality of discussions and lead to more effective and balanced decision-making (Fuzi et al., 2016). Companies with a CEO who maintains a strong board tend to have better governance practices. A strong board refers to a board of directors that actively participates in strategic decision-making, exercises independent judgment, and effectively oversees the company's management. This active engagement between the CEO and the board can lead to enhanced governance practices and better overall performance (Adams & Ferreira, 2009)

The effectiveness of board monitoring is significantly influenced by a variety of board characteristics. These characteristics contain the composition and diversity of the board. A well-structured and diverse board brings different perspectives, expertise, and experiences to the decision-making process. This diversity can lead to better-informed decisions, increased accountability, and improved corporate governance (Bear et al., 2010). Numerous studies have explored the

factors that contribute to enhancing board effectiveness and value. For instance, research has highlighted the positive impact of different types of directors on board performance, such as CEOs serving as directors (Fahlenbrach et al., 2008), the presence of bankers(Byrd & Mizrachi, 2005), politically connected directors (X. Li & Jin, 2021a), academic directors (White et al., 2014) and female directors (Terjesen et al., 2009). These diverse perspectives and experiences brought by directors from various backgrounds can contribute to better decision-making, increased accountability, and ultimately, improved corporate governance.

Military services are one of the important characteristics of directors that have an impact on firm performance (Bradley & Macintyre, 2018). A role of a military officer is typically focused on strategic planning, operation, and logistic within the military organization, whereas the role of a director is to focus on providing oversight and guidance for the management of the company. The role performed by military officials as firm directors could either increase or decrease firm performance. On the one hand, military officials may bring valuable skills and experiences to the table, such as strategic planning, leadership, and discipline. These skills could help to improve organizational performance by enhancing decision-making, setting clear goals and objectives, and improving overall efficiency. Additionally, military officials may have experience in crisis management, which could prove to be invaluable in situations where a company is facing significant challenges or threats (Luo et al., 2017). Presence military directors on a firm's board can have a negative impact on its performance. Military officials may lack the necessary business expertise or industry-specific knowledge to effectively lead a company in a competitive market. They may struggle to understand the nuances of the business, including customer preferences, market trends, and competitive pressures (An et al., 2020).

Military directors, in general, are expected to bring objectivity and diverse perspectives to the decision-making processes within a company's board. They are supposed to act in the best interests of shareholders and provide oversight of management. The presence of military directors is often associated with better corporate governance practices and increased accountability. While military directors may possess valuable leadership, strategic thinking, and crisis management skills acquired during their military service, the direct impact of these attributes on firm performance is not yet well-established. However, it is plausible that the unique experiences and perspectives of

military directors could positively influence decision-making in areas such as risk management, strategic planning, and organizational resilience.

The purpose of this study to investigate the impact of military directors on firm performance. Conducting research on the impact of military directors on firm performance in Pakistan is driven by several key reasons. Pakistan is a country with a unique socio-political landscape where the military has historically played a significant role in governance and decision-making. The military establishment in Pakistan has a strong presence and influence in various sectors, including the economy. Analyzing the impact of military directors on firm performance can contribute to understanding the broader implications for economic stability and investor confidence in such environments. Therefore, examining the impact of military directors on firm performance can be of particular interest in the context of Pakistan. Assessing the relationship between military directors and firm performance can provide valuable insights into the factors that contribute to the success or failure of businesses in Pakistan. This knowledge can help identify areas for improvement and inform policies aimed at enhancing the competitiveness of Pakistani firms. Overall, studying the relationship between military directors and firm performance in Pakistan can contribute to a broader understanding of the country's socio-economic landscape, governance structure, and the role of the military in shaping various sectors, including business and the economy.

We test this assumption using a sample of Pakistani firms from 2011 to 2022. Pakistan provides an ideal setting to investigate the proposed association for at least two reasons. First, we focus on the emerging economy having one of the largest military personnel. The military owns several largest companies, and many of the top executives in those firms have current or former military experiences. This provides a unique setting to investigate how executives in top management having military experience influence corporate outcomes. Second, while prior studies (Benmelech and Frydman 2015; Koch-Bayram and Wernicke 2018; Lin et al. 2011) mostly focused on a developed country setting, we seek to investigate the effect of military experience of executives in an emerging economy – Pakistan. This allows us to explore how military experienced directors' influence corporate performance in an emerging market setting. Our study makes several contributions to the literature.

First, we contribute to research on the factors determining corporate outcome by specifically focusing on the director's characteristics. Unlike the usual aspects in the literature, such as overconfidence, gender, expertise, etc., (Custódio and Metzger 2014; Faccio, Marchica, and Mura 2016; Malmendier and Tate 2005), we introduce an unexplored trait of the directors with corporate outcome – military experience.

Finally, we find Military Directors and its Impact on Firm Performance. These Results Provide New Moderating Attributes, Which Have Not Yet Been Explored by Other Studies That Seek to Investigate How Military Experienced Executives Influence Corporate Decisions (Law and Mills 2017; Benmelech and Frydman 2015). Thus, Our Findings Offer New Evidence on How the Behavior of Military Experienced Directors Can Be Contingent Upon Other Factors.

1.2 Problem Statement

The board of directors plays a significant role in assessing the firm's various strategic choices, which have an impact on the performance of the company. The board of directors plays a vital role in evaluating a company's strategic choices, influencing its performance significantly. They provide strategic oversight, make critical decisions on mergers, acquisitions, and diversification, and assess and manage risks. The board monitors financial performance, selects and evaluates top executives, manages stakeholders' interests, ensures compliance and ethics, and plans for executive succession. Their focus is on the long-term vision and sustainable value creation for the company's success. The study will look at whether having military independent directors is linked to either better or worse corporate performance. Military-trained CEOs follow more traditional corporate practices, spend less on R&D, and employ less financial leverage. When evaluating the effectiveness and composition of a board of directors, one should not focus solely on whether the board includes individuals with military backgrounds. Instead, a more comprehensive approach is needed, considering various other factors and characteristics that contribute to the board's ability to make sound strategic decisions and positively impact corporate performance. (Connell & Cramer, 2010).

1.3 Research objective.

The followings are the main objective of this study:

- To examine the impact of military directors on firm Performance listed into the SECP.
- To investigate the moderating role of military directors and firm size in explaining firm performance.
- Evaluate the opinion of decision-makers on the role of directors in firm performance.

1.4 Research Questions

- 1. Do military directors affect firm performance?
- 2. What is the moderating role of military directors and board size in explaining firm performance?
- 3. What is the opinion of decision-makers on the role of directors in firm performance?

CHAPTER 2

REVIEW OF LITERATURE

2.1. Introduction

The "Review of Literature" is an important component of the study as it provides a thorough analysis of previous research and perspectives on the relationship between military directors and business success in the context of the Pakistani stock market. It is critical to comprehend the function of military leadership in boardrooms as globalization and geopolitical forces continue to change the business environment. The objective of this chapter is to provide a synthesis of the existing literature, theoretical models, and empirical data that serve as the foundation for the investigation at hand.

2.2. Relevant Review of literature

Corporate governance has got attention and developed as a significant mechanism more than in the last decades. Th good corporate governance increases the company image, reduces the risks, and boosts shareholders' confidence. Furthermore, good corporate govern- ance develops a number of consistent mechanisms, internal control systems and external en- vironments that contribute to the business corporations' increase effectively as a whole to bring about good corporate governance. The basic rationale of corporate governance is to increase the performance of companies by structuring and sustaining incentives that initiate corporate managers to maximize firm's operational efficiency, return on assets, and long-term firm growth through limiting managers' abuse of power over corporate resources. Keasey and Wright (2018) indicated corporate governance as a framework for effective monitoring, regulation, and control of firms which permits alternative internal and external mechanisms for achieving the proposed company's objectives. The achievement of corporate governance re- lies on the mechanism effectiveness of both internal and external governance structures.

(Pearce and Zahra, 1992; Al-ahdal et al., 2020). Furthermore, the agency theory details the role undertaken by the board of directors, namely, monitoring and safeguarding the interests of shareholders. The separation between owners and managers has been noted to result in conflicts of interest amongst shareholders and managers (Jensen and Meckling, 1976). Ac- cordingly, board independence decreases the agency costs and expropriation tendency, thus resulting in effective monitoring and control, and ultimately yield higher and better firm fi- nancial performance (Fama and Jensen, 1983; Salehi et al., 2019).

Military experience helps military directors acquire distinctive qualities. Specific characteristics are likely to lead to particular behaviors, which in turn influence business re-sults. First, past research lists a number of traits that set military directors apart from other types. Veterans' experiences in the military leave a special mark on them and mold their values to align with those that are emphasized there, such as morality, responsibility, integrity, ethics, honor, loyalty, bravery, and selflessness (Elder, 1991). Second, prior research suggests that these traits often produce specific actions, such as increased public service efforts and a re- duced tolerance for mistakes or opportunism. Military CEOs are linked to higher acquisition results, according to prior research, which is consistent with more effort. The study conducted by (Lin et al., 2011) investigated the impact of CEOs with military characteristics on abnormal returns during the announcement period of acquisitions, as well as the influence of military backgrounds on corporate governance. Their findings revealed that CEOs with military back- grounds tend to experience significantly abnormal returns during acquisition announcements, and the presence of such CEOs is associated with improved corporate governance. The ex- planation provided by the researchers suggests that military-background CEOs make invest- ment decisions that are less likely to be influenced by private interests and more likely to align with the interests of shareholders. The study's findings suggest that investors and stakeholders may view CEOs with military backgrounds as having a management style that aligns with shareholder interests and is less prone to self-serving motivations. This perspective is crucial in the context of corporate governance, where the interests of executives and shareholders may sometimes diverge. Military-trained CEOs, according to Lin et al., are more likely to make investment decisions that prioritize the long-term success of the company and create.

value for shareholders. (Malmendier et al., 2011) conducted a study examining the relation- ship between managers with a military background and their managerial behavior, particularly in terms of financial decision-making. Their findings suggested that managers with a military background tend to exhibit a more aggressive approach, which translates into higher financial leverage for the firms they lead.

One potential explanation for this observed behavior lies in the unique characteristics and experiences associated with a military background. Military training often emphasizes discipline, decisiveness, and risk-taking, traits that may be conducive to assertive decision- making. When these individuals' transition to managerial roles in the corporate sector, they might apply a similar mindset to their financial strategies.

Chief executive officers with military experience have unique managerial traits. These CEOs with military experience typically implement more conservative corporate practices, devote less funding to R&D, and use less financial leverage. Their management style exhibits resilience and adaptation in chaotic times, and is particularly effective during economic down-turns. Additionally, the study also indicates that, in contrast to their counterparts, CEOs with a military experience are less likely to engage in fraudulent activities. Military CEOs are dis-tinctive in the corporate leadership space because of their cautious approach to procedures, wise financial plans, and less risk of fraudulent activities. These results provide important new information about how executive backgrounds affect managerial choices and organizational results (Benmelech & Frydman, 2015). On the other hand (Duffy, 2006) examined the effects of CEOs with military experience on the performance of S&P 500 companies, using stock price returns as a primary indicator of company performance. The study's main finding re- vealed a positive association, suggesting that firms with CEOs with military experience typi- cally exhibited higher average stock price returns in comparison to those without such CEOs. This phenomenon can be attributed to several factors inherent in military training, such as disciplined leadership, strategic thinking, crisis management skills, and an emphasis on team- work and decision-making. These attributes, cultivated in military settings, may contribute to CEOs making well-informed and strategic decisions that resonate positively with investors. Moreover, the study suggests that the risk management skills instilled through military experience may play a role in guiding CEOs to navigate challenges effectively. Overall, Duffy's

findings imply that the leadership qualities derived from military backgrounds can have a tangible and favorable impact on the financial performance of S&P 500 firms, as reflected in the observed higher average stock price returns

We anticipate military directors to behave similarly, which will eventually have an impact on business results, along the same lines of reasoning. Despite personal expenses, such as the time and effort required to monitor the CEO, military directors may put greater effort into their monitoring responsibilities (Hermalin & Weisbach, 1998) .According to (Kim et al., 2017) corporations in Korea run by CEOs and inside directors with a military experience are less likely to commit corporate fraud. This finding is derived from an analysis of various Korean data in a study. The suggestion is that top executives with a background of military service may help create a corporate culture that is more moral and accountable, which lowers the possibility of fraud in these companies. In similar, (W.-Y. Wong & Hooey, 2018) ob- served the relationship between political link businesses and former government or military leaders. It is generally established that having powerful political ties via government-affiliated companies has a favorable effect on corporate governance in terms of more effective super- vision, which in turn improves company performance. Corporate directors who had prior mil- itary experience were more likely to exhibit aggressive behavior, and as a result, they were more likely to increase financial leverage in the companies they served. Presence of military directors on the board was connected with lower levels of leverage. This could be as a result of the culture of discipline, prudence, and attention to detail that military training instills, which can transfer to the boardroom.

According to (Lin et al., 2011) there is a relationship between military experience among corporate executives in China and their investment decisions, financial policies, ethical behavior, and firm performance. The research reveals that executives with military back- grounds tend to adopt more aggressive financial policies by utilizing excessive leverage, ob- taining more new borrowing through bank loans and debenture issuance, and retaining fewer earnings compared to their non-military counterparts. Furthermore, military executives in China tend to allocate less towards research and development and underperform relative to non-military executive.

According to the (An et al., 2020), investigated the influence of military directors on a firm's board and its subsequent impact on corporate performance. The findings revealed a negative correlation between the presence of military directors and a company's performance, attributing this effect to the perceived lack of business-related expertise among military di- rectors. This implies that, for businesses to thrive, having directors with industry-specific knowledge and experience is crucial. One key factor contributing to the observed negative impact could be the distinct skill set and focus that military leaders often bring to the board- room. While military directors may possess strong leadership, strategic planning, and crisis management skills, they might lack the specialized business acumen required in the corporate environment. Business decisions necessitate a nuanced understanding of industry dynamics, market trends, and financial considerations, which might not be the primary expertise of mil- itary directors. Moreover, in China, political connections are often viewed as an essential fac- tor for achieving success in business. (Li & Jin, 2021) examine the effect of political connections on corporate performance, political connection, a CEO or chairperson who is or was a government or military leader, they found that politically connected private firms perform better than such connections at local SOEs, which leads to bad performance. At central SOEs, political connections have no effect on company performance.

Military-connected board of directors is an effective corporate governance mechanism that leads to long-term corporate policies and outcomes. Appointing military-experienced di- rectors could be a beneficial and ethical corporate strategy if it positively influences organi- zations' decision-making processes and ultimately outcomes. According to agency cost the- ory, military-connected boards misuse companies' resources and constitute a weakening gov- ernance framework. Centering on the attributes of the military occupation (Jaroenjitrkam et al., 2024) According to US companies frequently select board members with military expe- rience following legal problems involving misbehavior or fraud. This is due to the fact that these companies desire board members who uphold strong ethical standards in order to win over stakeholders. (Jha et al., 2023) offers more evidence to support the view that the military has a remarkable ethic: CEOs with military experience typically make corrections to financial accounts when they discover misstatements in financial reports.

influence the behavior of the military leadership in the country. (Qian et al., 2010) also document that military directors are more likely to extract benefits at the expense of other stake- holders. As such, if agency cost prevails, we expect firms with military connected board members to poorly implement corporate policies, resulting in poor corporate outcomes. We refer to this as the agency cost theory. (Suriyapongprapai, 2019) refer to military connected boards as a special case of politically connected firms. Given these different definitions and various stages of stock market developments, it is unsurprising that existing studies report mixed ev- idence of the effects of political connections on corporate outcomes and policies. (Wesley et al., 2022)offers more evidence to support the view that the military has a remarkable ethic: CEOs with military experience typically make corrections to financial accounts when they discover misstatements in financial reports. Nevertheless, there exists a strong interconnection between the military and politics in Thailand, which can potentially influence the behavior of the military leadership in the country.

2.3. Comparative analyses of other type of directors

Globally, firms are redesigning the corporate board of directors' structure to enhance diversity and construct a more heterogeneous group of decision-makers (Kumar & Zattoni, 2016) The increasing trend of diverse boards tends to serve better firm performance (Farrell & Hersch, 2005). Diversity in the decision process explains the likelihood of finding women in firms' top leadership (Cook & Glass, 2014). Different authors argue that greater gender diversity should improve directors' monitoring and advising roles, and the quality of boards' decisions (Baghdadi et al., 2023). companies with directors from academia are associated with higher performance and this relation is driven by professors without administrative jobs. Pacifically, our results show that the presence of academic directors is associated with higher acquisition performance, higher number of patents and citations, higher stock price in formativeness, lower discretionary accruals, lower CEO compensation, and higher CEO forced turnover-performance sensitivity. Overall, our results provide supportive evidence that aca- demic directors are valuable advisors and effective monitors and that, in general, firms benefit from having academic directors (Francis et al., 2014)

On the other hand, some studies investigate the joint effect of foreign directors (FDs) and firm performance on the corporate strategic change. Findings indicate that FDs rich in appropriate experience are associated with superior strategic change, measured both in terms of variation in firm strategy over time and deviation from industry norms. The findings con- firm that FDs are a salient driver of strategy change. The strength of the effect, however, depends on the firm performance. (Samara & Yousef, 2022)

According to the Preuss & Königsgruber, (2021) find that politically connected firms are more likely to receive financial support from the government during a crisis. Gordini & Rancati, (2017) found that a higher proportion of women on boards increased the firm market value (Tobin's Q). Contrarily, some studies highlight no significant difference among them in board monitoring effectiveness, for instance Bajra & Cadez, (2020) examined the effects of regulatory policies on European firms' corporate governance quality cross-listed in the United States. They revealed that the compliance levels increase over time, but they vary considerably across constituent provisions.

2.4. Control Variable

Numerous research has examined into the relationship between profitability and firm size. Even if firm size is one of the main issues with contemporary enterprise theory, it is nevertheless crucial to the study of enterprise growth. In adding, studies have found that the relationship between firm size and profitability varies by industries. According to (Becker- Blease et al., 2010) this relationship is industry-specific, whereas in most of the industry, firm's ability to make profit is still increasing at a decreasing rate. Wang (2011) addressed the different opinions from these studies that have opposite results. There are various studies ex- amining the relationship between firm size and profitability. According to Do, (2013) there was a positive correlation between firm size and profitability rate, mainly because of large firm's efficiency gain and high market power. Rahman & Yilun, (2021) Analysis on the im- pact of firm age and size on performance revealed that older firms performed better than larger ones in terms of productivity and profitability. On the other hand, Banchuenvijit (2012) found that firm size was negatively associated with firm performance.

Numerous studies have been conducted to investigate the relationship between firm age and profitability; however, these studies showed mixed results. Nakano & Nguyen, (2011) research suggested that older firms have a more stable capital structure, as well as more social resources and experiences; therefore, they can spend more time and resources on R&D activ- ities, thereby improving their competitiveness and value. Moreover, younger firms have lim- ited R&D specialists, budget, or even market information, and blindly investing large amounts of money would not improve their core competitiveness but would rather cause their firm performance to decrease (Guo & Zhang, 2007). On the other hand, (Song et al., 2020) con- duct a study on American listed firm found that a favorable correlation between greater boards and better financial results. More directors are found on the boards of better, more diverse corporations (Fernández & Tejerina Gaite, 2020).

According to Alibabaee & Khanmohammadi, (2016) there may be a positive or neg- ative effect on a business's performance depending on the link between firm leverage and corporate performance. This connection has the influence to improve or harm a company's financial situation and future prospects. When businesses use great leverage to create expen- sive advertising methods. However, these marketing strategies may also raise a company's worth and lessen the impact of risk concerns Leverage affects a company's return on equity (ROE), which is a measure of its profitability relative to shareholders' equity. When a firm effectively uses debt to generate higher returns than the cost of borrowing, it can enhance ROE. However, if the returns on the invested funds are lower than the cost of debt, it could lead to a decline in ROE. When a company needs external funding during the crisis (Didier et al. 2021) enterprises employing debt finance may compete with equity, notwithstanding Ghar- dallou's (2022) claim that debt structure hinders firms' performance. The authors' argument that the advantage of adding debt is smaller than the associated costs of it was supported by research done by Vithessonthi and Tonurai (2015), which showed that Thailand enterprises indicated a negative association. According to (Iqbal & Usman, 2018) analysis high interest rates and increased debt levels may lower company value and thus lower business perfor- mance. As a company takes on more debt, it incurs interest expenses on the borrowed funds. Higher interest payments can reduce a firm's net income and, in turn, its profitability. This

can be especially critical during economic downturns or periods of rising interest rates, as interest expenses could put strain on the company's cash flow.

2.5. Macroeconomic Variables

A large number of existing studies in boarder literature have examine on macroeconomic variable and firm performance. The results of several studies on the connection be- tween macroeconomic variables and the performance of publicly listed corporations have pro-duced inconsistent results. The influence of macroeconomic factors on firm performance is examined by (Mwenda et al., 2023) discovered that GDP and inflation had substantial positive coefficients while interest rates had large negative coefficients, demonstrating the importance of macroeconomic issues in determining company success. There exist a considerable body of literature on impact of macroeconomic variable and firm performance. (Rehman, 2016) looked at seven macroeconomic variables and came to the conclusion that although inflation rate was favorably connected with business performance, other parameters like interest rate were adversely correlated with the profitability of listed enterprises. According to Vera (2019), the high inflation rate in the nation caused publicly listed enterprises to have decreased income. (Alibabaee & Khanmohammadi, 2016) (2016) conducted research on macroeconomic variables and how they affected Iranian firms' performance, finding that inflation and interest rates were detrimental to business performance. (Tuncay & Cengiz, 2017) concluded that Turkish practice demonstrates a positive correlation between firm performance (profitability) and GDP. Latif et al., (2023) empirically examine the impact of GDP and interest rate on firm performance. It is observed that GDP and interest rates have a favorable effect on the performance of Malaysian businesses.

Mwenda *et al.*, (2023) examined the effects of interest rates and inflation on the return of the New York equity Exchange-listed equity market. He revealed that the inflation rate and return on asset had a negative inverse correlation. Furthermore, there existed a positive and significant correlation between the interest rate, spot exchange rate, and stock returns. The relationship between macroeconomic indicators and entity performance that is pertinent to

Pakistani textile industries was noted by (Mohd & Siddiqui, 2020). The study found a positive and significant correlation between the entity's performance and the inflation rate.

The existing literature has extensively explored the relationship between military di-rectors and firm performance in various countries such as Canada, UK, and China. However, there has been a significant gap in research regarding the application of these findings to the Pakistani context. This gap is primarily due to the substantial differences in business environment, cost of doing business, and regulatory framework between countries. Therefore, it is crucial to conduct a study specifically focused on Pakistani firms to better understand the relationship between military directors and firm performance. The aim of this study is to ad-dress this research gap by examining the impact of military directors on firm performance, particularly in the context of Pakistani firms, where empirical evidence on this subject is relatively scarce.

2.6. Theoretical background

There are numerous theories related to firm performance in the field of economics, manage- ment, and organizational studies. These theories attempt to understand the factors that influ- ence how well a firm performs in terms of profitability, growth, efficiency, and overall suc- cess.

Relevant theories which will discussed in detail then justification of topic the relationship between military directors and firm performance. This theoretical framework aims to explore the potential impact of military directors on firm performance, considering the distinctive qualities they bring to the boardroom and their potential influence on strategic decision-mak- ing, risk management, and organizational resilience. "The presence of military directors on firm performance has gained increasing attention due to their unique skillsets, experiences, and perspectives. This theoretical framework aims to explore the potential impact of military directors on firm performance, considering the distinctive qualities they bring to the board- room and their potential influence on strategic decision-making, risk management, and organ- izational resilience.

Agency theory

Agency theory is a concept in economics and organizational behavior that explores the relationship between principals (such as shareholders or owners) and agents (such as manager's employees) within an organization. It examines the potential conflicts of interest that may arise between these two groups and the mechanisms used to align their interests(Jensen & Meckling, 1976).

Jensen and Mackling presented the agency theory framework, discussing how managerial be-havior is influenced by the separation of ownership and control in a corporation. They intro-duced the concept of agency costs and highlighted the importance of aligning the interests of managers and shareholders to mitigate potential conflicts.

In last few decades world has seen many recessions. Therefore, corporate governance gets more importance and attention. In many past researches importance of corporate governance related to firm's outcome and performance is analyzed. However, very few researches show the relation of Military directors and firm performance. Corporate governance has influence on internal management. If the control on internal management is weak then it promotes agency problem in the firm.

The role of corporate governance in relation to a firm's performance is examined in numerous previous studies. The study of the connection between military directors and corporate performance is quite rare. A few pertinent theories, nevertheless, could be able to help explain how the presence of military directors might affect the performance of a corporation. Internal management is influenced by corporate governance. Insufficient internal management over- sight encourages agency issues within n the company (Bear et al., 2010). Various theories, including "agency theory," have provided theoretical evidence for this relationship between corporate governance and a firm's performance. Theory of agency the principal-agent di- lemma, first identified by Jenson and mackling in 1973, occurs when managers begin to abuse shareholders' rights by prioritizing their personal interests over those of the company's stock- holders. Numerous studies demonstrate that corporate governance reduced agency difficul- ties, and both individual and institutional investors always favor well-governed companies. Institutional and management ownership, however, also lessens the agency issue because they must safeguard their investment and control. The aim of this research is to identify the rela- tionship between financial leverage and the performance of Textile Composite Companies of

Pakistan. Pakistan Textile Composite Companies which are listed in PSX (100-index) are selected.5-year data is collected from 2011-2015 and top 16 companies are selected as a sam- ple. Using descriptive statistics, correlation analysis, and a regression model to identify the results. Results show that financial leverage has a negative and significant effect on firm ROE and financial leverage has a positive and significant effect on firm ROA. Further study indi- cates that the highinterest rate and more amount of debt decrease the value of equity and has a negative impact on firm performance. On the other hand, the amount of debt has a positive impact on firm ROA. Results show that financial leverage has a positive impact on firm per- formance if the number of debts do not exceed the amount of equity (Morya, 2012). According to agency theory, military directors can better align managers' and shareholders' interests by lowering agency costs. Military directors who have served in the military may bring to the boardroom a distinct viewpoint and set of abilities that can enhance monitoring and decision- making. High-ranking, experienced MDs might be more effective at monitoring management and reducing agency costs due to their training in ethical conduct and evaluating performance. However, a hierarchical military background could lead to hesitation in challenging authority figures. For instance, directors with military experience may have excellent strategic planning and risk management abilities that can aid the company in navigating challenging and uncertain conditions (Kyereboah-Coleman, 2007).

Resources dependency theory

The resource dependency theory gave the board's duties as a resource to the company a theo- retical foundation (Hillman & Dalziel, 2003). Since this is a valued quality that a director can contribute to the board, choosing directors can therefore prove ide social capital and expertise to the company (Stevenson & Radin, 2008). From this vantage point, the board's makeup is seen as a resource that can boost the company's worth by enhancing performance.

This theory's central claim is that businesses strive to impose control over their surroundings by enlisting resources necessary for survival (Salancik & Pfeffer, 1978)In order to manage dependence and so benefit the firms, crucial resources are frequently put to the board. External directors "bring resources to the firm, such as information, skills, access to key constituents (e.g., suppliers, buyers, public policy decision-makers, social groups), and legitimacy" (

Hillman, & Dalziel, 2003). As an illustration, after the 2008 financial crisis, numerous financial directives included individuals with risk management expertise on their boards. Once appointed to the boards, these individuals serve the company's interests (Ayuso & Argandoña, 2007).

Resource dependency theory also adopts a broad perspective that the expertise of directors is a resource that can be exploited to enhance the performance of the company. Giving manage-ment recommendations on strategic activities is also included in the resource envelope (Poppo and Zenger, 1998). In this situation, companies with solvency problems are more likely to add a financial institution representative to their board of directors (Mizrahi and Stearns, 1988). Therefore, this idea suggests that the expertise of directors is a resource that can enhance the performance of the company. Resource dependency theory suggests that MDs, especially those with connections from high ranks or specific branches like logistics, can provide valuable access to government resources and enhance a firm's legitimacy. The downside is a potential overreliance on these connections, limiting strategic flexibility.

2.7. Literature gap

Despite a growing body of literature on the relationship between military directors and firm performance in other countries, in the context of Pakistan, there exists a noticeable re- search gap regarding the influence of military directors on firm performance. Despite the considerable involvement of the military in various aspects of Pakistani society, including the economy, empirical studies specifically examining the impact of military representation on corporate boards remain scarce (Connell & Cramer, 2010). Numerous studies have been con- ducted in developing and developed countries to explore the association between corporate governance and firm performance. Duane, Hu, and Liu (2020) have investigated the impact of have military directors and firm performance. Their result shows that military officials may lack the necessary business acumen or industry-specific knowledge to effectively lead a com- pany in a competitive market. They may struggle to understand the nuances of the business, including customer preferences, market trends, and competitive pressure. Further Lou et al, (2017) investigate that Military services are one of the important characteristics of directors that have an impact on firm performance. There are limited research on the topic of military

directors and firm performance in case of Pakistan .Nawaz et al, (2023) explores the influence of military directors in protecting shareholders' wealth through CEO compensation and corporate dividend payout policies. Presence of military directors on Pakistani corporate boards reduces agency costs and in turn enhances shareholders' wealth. Results also indicate significant positive relationship between presence of military directors on boards and dividend payout, hence signifying that such di- rectors are effective in enhancing shareholders' wealth by reducing free cash flow opportunities that would otherwise be deployed by agents for their private benefits . After analyzing previous litera- ture, it can see that previous studies have examine the relationship between military directors and firm performance in different countries but country like Pakistan have not been studied. The result of above study cannot be directly extrapolated without studding the firm in Pakistan there is huge difference between. There is huge difference between business environment and cost of doing business. However, the empirical evidence on military directors and firm performance is relatively limited.

2.7. Significance of study

This study has a great significant advance our understanding of the relationships be- tween military directors and firm performance. However, corporate governance and organi- zational standards differ throughout nations and economies. The impact of military directors and their impact on firm performance will be looked at in this study, a mostly unexplored field of research. This study will contribute to the existing literature on relationship between military directors and firm performance. This study can add information on corporate govern- ance and diversity on boards while also providing businesses and policymakers with some valuable information. The outcomes of this study have the potential to assist both companies and policymakers by emphasizing the possible advantages of appointing veterans as military directors on corporate boards and providing insights for the formulation of regulations that facilitate such appointments. For instance, the results indicate that military directors have a substantial impact on firm performance, policymakers may contemplate increasing the inclusion of directors with military backgrounds in their governance policies. The findings of this study can contribute to future research by offering a more thorough understanding of the corsection between military directors and firm performance.

2.9 Limitations/ Future direction

Addressing limitations transparently and planning for future research directions is essential for advancing knowledge and contributing to the academic or practical understanding of the subject. This study has some limitations.

- 1. Findings in the context of Pakistan may not be easily generalizable to other countries or regions with different political, economic, and cultural environments. The unique geopolitical landscape of Pakistan may limit the broader applicability of the study's results.
- 2. The political landscape in Pakistan is dynamic, and changes in governance, policies, or military influence over time can impact the study's relevance and the applicability of its conclusions to different periods.
- 3. The impact of military directors on firm performance may vary across different industries. The study might not capture the nuanced effects in various sectors, potentially oversimplifying the relationship.

2.10 Organization of the Study

This study is organized into 6 chapters which are again subdivided into further headings. Chapter1 of this study presents the introduction of the research. Chapter 2 highlights the the- oretical literature and background of the study. Chapter 3 discuss the empirical literature by considering all objective of the research. Chapter 4 discusses the methodology of the study and variable description which is followed by Chapter 5 with the final finding and result of the study. Finally, chapter 6 concludes the main findings of the research with policyrecom- mendations.

CHAPTER 3

DATA AND METHODOLOGY

3.1. Introduction

The relationship between military leadership and company success is an interesting topic in the field of corporate governance, especially when considering the Pakistani stock market. The foundation for a methodical examination into the complex dynamics of this connection is laid forth in this chapter on "Data and Methodology". In order to enable a thorough examination, the first emphasis is on clarifying the painstaking procedure for gathering data, together with the standards that direct the listing of companies. The chapter then explores the study design and analytical methods, giving readers a clear understanding of the methodical procedures used in order to derive significant discoveries. This chapter confirms the validity of our study by using an open and meticulous methodology. It also paves the way for a comprehensive investigation of the influence of military directors on the performance of companies listed on the Pakistani stock exchange.

3.2. Data and Methodology

The research approach used in this study is mixed, which combining quantitative and qualitative techniques to thoroughly examine the impact of military directors on company performance in the Pakistani stock market. The study's quantitative component centers on a dataset that spans the last 10 years and includes (60) listed companies in Pakistan. This dataset, which includes 30 companies with military directors and 30 companies without a military director on their boards of directors, is properly equal.

Financial reports, metrics for performance, and other pertinent data are carefully scrutinized to get statistical findings that enable a comprehensive comparative examination comparing companies with and without military directors. Important financial metrics, such as sales growth, profitability, and shareholder returns, are used as quantitative benchmarks to evaluate how military leadership affects business performance over a certain period.

Through in-depth interviews and content analysis, qualitative observations are obtained to supplement the quantitative method.

run by military personnel by capturing the complex viewpoints of corporate executives, military directors, and other stakeholders.

This study's mixed research technique aims to provide a comprehensive understanding of the relationship between business success and military leadership. Our goal is to find patterns, correlations, and contextual insights that add to a more nuanced understanding of the intricate link between military directors and corporate performance in the Pakistani stock market by combining quantitative rigor with qualitative depth.

3.3. Research Design

The main goal of this study develops a reliable indicator of company performance and to methodically investigate the connection between military directors and company success in the Pakistani stock market. The study methodology uses a theory of causality to evaluate the cause-and-effect relationship between military directors and business performance in order to achieve this goal. This study is well suited for a statistical research design, which enables an analysis of the relationship between changes in the independent variable (the number of military directors on the board) and variations in the dependent variable (firm performance). In the particular setting of the Pakistani stock market, this research aims to reveal the complex dynamics impacting corporate results by exploring the influencing processes between military directors and business performance. The use of a causal study approach emphasizes the goal to go beyond simple correlation and develop a deeper comprehension of the potential influence that military leadership may have had on listed enterprises' success in the previous 10 years.

3.4. Study Sampling

The current study adopts a meticulous approach to sample selection, aimed at gathering pertinent data while adhering to predefined criteria. Initially, data were collected from all companies listed on the Pakistan Stock Exchange (PSX) during the period spanning 2012 to 2021. Subsequently, a random selection method was employed to refine the sample, resulting in the selection of a representative subset of businesses for comprehensive analysis.

Several exclusion criteria were applied to bolster the resilience of the sample. Firstly, companies listed for fewer than ten years were excluded to focus on entities with a more established and stable market presence. Additionally, companies with missing data for any variable were disqualified.

to uphold data integrity. Financial institutions were omitted from the sample due to their distinctive characteristics, aiming for a more homogeneous dataset. Furthermore, non-exporting enterprises were removed to concentrate on businesses engaged in international trade.

The sample encompasses a diverse array of industries, as detailed in the sectors table. These sectors include Textiles (8 firms), Sugar (6 firms), Food (5 firms), Chemicals and Pharmaceuticals (6 firms), Cement (6 firms), Motor Vehicles, Trailers & Auto Parts (7 firms), Information and Communication Services (5 firms), Petroleum (6 firms), and Fertilizers (6 firms). With a total of sixty businesses included in the sample, comprehensive coverage of various sectors of the Pakistani stock market is ensured. This strategic sample selection method lays the groundwork for a comprehensive analysis of the relationship between military directors and company success within the specified period and market context.

Table5. 1: Sample Size of Firms

Sectors	No. of Firms. of Firms
Textile Sector	8
Sugar Sector	6
Food Sector	5
Chemical \$ Parma Sector	6
Cement Sector	6
Motor Vehicles, Trailers & Auto parts	7
Information and Communication Services	5
Petroleum Sector	6
FERTILIZE	6
TOBACO	4
WOOLEN	1
Total	60

3.5. Econometric Model

The econometric model used in this study has been modified to adjust for the unique characteristics of panel data, which includes both time series and cross-sectional dimensions. Incorporating both forms of data enhances the study by concurrently collecting cross-sectional fluctuations and trends over time. The panel data used in this study has equal distribution, ensuring that the number of cross-sectional units and time intervals are constant throughout the panel.

Gujarati (2003) defined a balanced panel as one that maintains the same set of cross-section panel units and temporal observations. On the other hand, an imbalanced panel results from differences between the time series and the panel's cross-sectional units. Making this difference is essential to comprehending the dataset dynamics and guaranteeing the econometric model's dependability.

By a panel data technique, this research combines the benefits of cross-sec- tional and time series data, providing a thorough understanding of the connection between military directors and business success. The econometric model will make use of advanced statistical methods appropriate for panel data analysis, enabling a thorough investigation of the causal relationships and dynamic interactions throughout the designated period of time in relation to the Pakistani stock mar- ket.

The following model used in this study.

$$ROA_{i,t} = \beta_0 + \beta_1 MID_{i,t} + +\beta_2 BS_{i,t} + \beta_3 Fage + \beta_4 SGRO_{i,t} + \beta_5 FS_{i,t} + +\beta_6 LEV_{i,t} + \beta_7 GDP_{i,t} + \beta_7 IR_{i,t} + \beta_8 IF_{i,t} + \varepsilon_{it}......(1)$$

(Return on asset (ROA) is the dependent variable, $\beta 0$ is the constant, $\beta 1$ to $\beta 9$ are the estimated coefficients of military directors, women directors, GDP, interest rate, inflation rate, money supply, ex- change rate, board size, firm age, sales growth, and leverage ε is an error term that is intended to be white noise, where I and t are respective firm and time units).

ROA(I, t) = Return on Asset, MD(I, t) = Military directors,

BS (I, t) =Board Size, FA (I, t) =Firm Age, SGROW (I, t) =Sales growth, LVE (I, t) =Leverage GDP (I, t) =Gross domestic product, IR (I, t) =Interest rate, IF (I, t) =Inflation rate, β =Coefficient.

3.6. Firm performance

Firm performance is a dependent variable that is measured through return on asset (ROA). Return on asset (ROA) measures how well a firm utilizes its assets to generate profit. It is an accounting-based measure of a company's performance. It is calculated as net profit divided by total assets.

ROA=net profit divide /total asset(2)

3.7. Military directors

In this study military directors are independent variable. Following previous studies (Lin et al. 2011) measure military directors (signified by MD) using a dummy variable that takes the value of one if the director has military experience (current or retired military personnel), and zero otherwise.

3.8. Board size

Board size refers to the number of individuals who serve as directors on a company's board of directors. It represents the total sum of board members, including both executive (internal) and non-executive (external) directors.

BS=Total number of board members

3.9. Firm leverage

Leverage is measured by ratio of a company's total debt to total assets. According to Strata's (2017) analysis of small firms' financial performance and leverage, businesses with larger debt loads often experience worse financial outcomes.

Firm leverage = (total debt)/ (total asset) (3)

3.10. Firm size

Another control variable is firm size. It is calculated by taking natural logarithm of the total assets.

global enterprises with thousands of workers and activities in several nations are two different sizes of busi- nesses. Connelly and Limpa Hayom (2006) look at the board traits of Thai life insurance firms. The findings demonstrate a positive correlation between business size and profitability; larger companies have a higher probability of surviving a recession because they are more equipped to absorb losses.

3.10.1. Firm age

The length of time a company has been in operation determines its age. Numerous researchers, such as Horvath and Spirollari (2012) and Chantrataragul (2007). Tsuruta (2017), Hidayat and Utama (2015) used the age characteristic in their study on the success of companies and found conflicting findings. Chantrataragul (2007) found a positive link between company age and Tobin's Q ratio but a negative correlation between firm leverage. Tsuruta (2017) examined small businesses in Japan and found that company size had a beneficial impact on business success.

3.10.2. Sales growth

Sales growth refers to the rate at which a company's sales revenue increases over a specific period. It is a key performance indicator that indicates the company's ability to generate more sales over time.

Sales Growth = (Current Year Sales - Previous Year Sales) / (Previous Year Sales) *100.....(5)

3.10.3. Gross domestic product

GDP is an economic indicator that measure the total value of all final goods and services produce within the country during specific period. GDP is used to gauge the size and health of an economy. GDP include the goods and services produce by individual business and government it in compose various sector such as agriculture, manufacturing, services and more. When GDP is growing, it indicates a healthy economy with increased consumer spending and business investment, which can positively impact firm performance.

influenced by a wide range of factors beyond just GDP growth.

3.10.4. Interest rate

Overall, the relationship between interest rates and firm performance is complex and depends on various factors such as the level of borrowing, industry dynamics, inflation expectations, and overall economic conditions. However, in general, lower interest rates tend to be associated with improved firm performance, while higher interest rates can pose challenges for businesses.

3.10.5. Inflation rate

Inflation rate refers to the percentage increase in the general price level of goods and services over a specified period. It is commonly measured using various indices, such as the Consumer Price Index (CPI), which tracks changes in the prices of a basket of commonly purchased goods and services. Inflation rate profoundly impacts firm performance. High inflation escalates the cost of goods and services, burdening firms with in- creased operating expenses such as raw materials and labor. Consequently, profit margins may shrink unless firms raise prices, potentially dampening consumer demand due to decreased purchasing power.

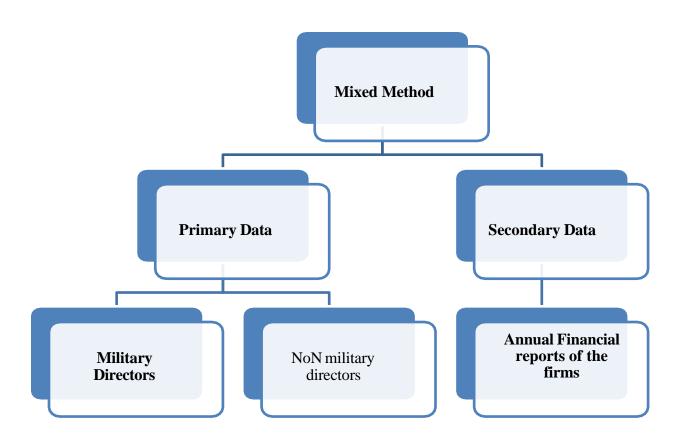
3.10.6. Inflation rate

Inflation rate refers to the percentage increase in the general price level of goods and services over a specified period. It is commonly measured using various indices, such as the Consumer Price Index (CPI), which tracks changes in the prices of a basket of commonly purchased goods and services. Inflation rate profoundly impacts firm performance. High inflation escalates the cost of goods and services, burdening firms with in- creased operating expenses such as raw materials and labor. Consequently, profit margins may shrink unless firms raise prices, potentially dampening consumer demand due to decreased purchasing power.

3.10.7. Mixed Method Approach

'Mixed methods' is a research approach whereby researchers collect and analyze both quantitative and qualitative data within the same study. Growth of mixed methods research in economics and social sciences has occurred at a time of internationally increasing complexity in financial growth. Mixed methods research draws on potential strengths of both qualitative and quantitative methods,

allowing researchers to explore diverse perspectives and uncover relationships that exist between the intricate layers of our multifaceted research questions. As providers and policy makers strive to ensure quality and safety for patients and families, researchers can use mixed methods to explore contemporary healthcare trends and practices across increasingly diverse practice setting.



3.11. Methods of Data Collection

To collect the necessary data, a combination of primary and secondary data sources can be utilized. The primary data collection method may involve surveys or interviews with key stakeholders, such as CEOs, board members, and military directors, to obtain their perspectives on the topic who are listed in PSX (Pakistan stock exchange). Secondary data 100-listed non-financial enterprises listed in PSX used such as financial reports, corporate governance reports, and industry databases, can also be collected and analyzed to provide broader context for the study. Similarly, panel data for macroeconomic variables like GDP, inflation rate, interest rate, will gather from the National Bureau of Statistics (NBS) and the State Bank Pakistan annual reports (SBP). Panel data will used because they may combine cross-sectional and time series dimensions, eliminate measurement challenges caused by omitted and unobservable variables, and produce more trustworthy and generalizable. conclusions than cross-sectional and time series data (Biorn, 2017)

Table 2: Variable Description and measurement

Variable	Measurement		Year
ROA	net profit divide /total asset	Annual report of the firm	2012-2021
LVERAGE	Total debt / total shareholder Equity	Annual report of the firm	2012-2021
%OF MD	percentage from total directors	Annual report of the firm	2012-2021
BSIZE	Natural logarithm of total	Annual report of the firm	2012-2021
FIRM AGE	Natural logarithm of total asset	Annual report of the firm	2012-2021
SALE GROWTH	(Current year-previous year)	WDI	2012-202
	(Previous year sale)		
GDP	Real GDP Growth	WDI	2012-2022
Interest rate	Real Interest Rate	WDI	2012-2022

3.12. Econometrics Techniques

As there is first a need to look at the nature of data to select the suitable econometrics tech- nique. Descriptive statistics is used to understand the central tendency, dispersion, and shape of the data distribution. As this study is based on panel data set so pooled OLS, random effect model, and fixed effect model is the most appropriate method for estimation. The Housman test is used to make a choice between random and fixed effect models for the analyses. As there is no representative of the trade policy uncertainty of Pakistan this will be constructed through principal component analysis (PCA). The explanation of all econometrics techniques used in this study is given below.

3.8.7. Descriptive statistics

Descriptive statistics is a subsidiary of statistics that involves reviewing and describing key features of a datasets. Descriptive statistics play a vital role in data analysis by summarizing and describing the main characteristics of a datasets. They provide a foundation for data exploration, visualization, comparison, and quality assessment, aiding in understanding and interpreting the data and effectively communicating the findings.

3.8.8. Correlation

Correlation techniques are used to measure and analyze the relationship between variables.

Correlation refers to the statistical link or dependence between two or more variables, indicating how changes in one variable are associated with changes in another variable. The sign with the correlatio variable suggests the direction of relations between the two variables.

3.8.8. Panel Regression (Housman Test)

The Housman test is used to determine whether the random effects or fixed effects model is more appropriate for the data. The test compares the estimated coefficients from the two models and assesses whether the differences are statistically significant. If the null hypothesis is rejected, indicating a significant difference, the fixed effects model is preferred.

3.8.10. Fixed effect model

This model proposes that intercept will not be the same for every cross section but will be different from each cross section. A separate dummy is included in this method to show the extent of dissimilarity between the intercept of each cross section. It is also called least square dummy variable. For example, if there is diversity in data, intercept is different for each unit; hence best data for estima tion would be the fixed model. The hypothesis of the same intercept would be rejected when the stand- ard F-statistic is significant and hence fixed will be applied, otherwise common effect model will be used for the estimation. The fixed effect model can be written as follow:

The equation for the fixed effects model is:

$$Y_{i,t} = \beta_{i,t} + \beta_1 X_{i,t} + + \varepsilon_{it} \operatorname{eq}(2)$$

3.8.11. Random Effects

This model is same as fixed effect model, it is used when intercept is different for all cross sections and time period, but here in this model it is check whether intercept follow a systematic p. This model is same as fixed effect model, it is used when intercept is different for all cross sections and time period, but here in this model it is check whether intercept follow a systematic pat-tern or not. It assumes that beta is not meaningful because it follows a random path.

$$Y_{i,t} = (\beta + \mu) + \beta_1 X_{i,t} + \varepsilon_{it}$$
 eq (3)

CHAPTER 4

RESULTS AND DISCUSSION

This chapter discusses the estimation result of the research. This study investigates the relationship between firm performance and military directors. This chapter includes pre- estimation tests such as descriptive statistics, and correlation tests. Section two also presents the estimation results for the relationship between FP and MD of PSX-listed firms.

4.1. Quantitative analysis

4.1.1. Descriptive Statistics

The descriptive statistics of the variables are important to calculate before doing the final estimation. As descriptive diagnosis helps to check the characteristics of varia bless used for the research.

Table 1: Descriptive statistic

	Std. Dev.	Min	Max	N
10.97	9.70	-54.00	61.00	733.00
1.66	1.37	0.00	8.00	733.00
1.07	0.12	0.00	0.70	733.00
8.37	1.94	5.00	15.00	733.00
43.99	16.46	20.00	80.00	733.00
16.70	1.80	12.99	20.85	733.00
12.72	8.01	0.02	131.90	733.00
1.63	7.20	0.00	119.98	733.00
3.72	1.79	0.74	7.13	733.00
4.39	1.56	1.27	6.49	733.00
8.468259 -	4.49	2.53	19.87	733.00
	1.66 1.07 8.37 43.99 16.70 12.72 1.63 3.72 4.39	1.66 1.37 1.07 0.12 8.37 1.94 43.99 16.46 16.70 1.80 12.72 8.01 1.63 7.20 3.72 1.79 4.39 1.56	1.66 1.37 0.00 1.07 0.12 0.00 8.37 1.94 5.00 43.99 16.46 20.00 16.70 1.80 12.99 12.72 8.01 0.02 1.63 7.20 0.00 3.72 1.79 0.74 4.39 1.56 1.27	1.66 1.37 0.00 8.00 1.07 0.12 0.00 0.70 8.37 1.94 5.00 15.00 43.99 16.46 20.00 80.00 16.70 1.80 12.99 20.85 12.72 8.01 0.02 131.90 1.63 7.20 0.00 119.98 3.72 1.79 0.74 7.13 4.39 1.56 1.27 6.49

The Table 2 represent the descriptive statistics a comprehensive summary of the key varyables in the study, shedding light on the characteristics of the firms under investigation. The table includes information about central tendency, range of data, and standard deviation which show the variation in data and size of variables. The return on assets of firms lies between-54 to 61 with standard deviations9. 69834. Notably, the mean Return on Assets (ROA) of 10.97 indicates a posactive average return, reflecting the firms' ability to generate profits from their assets. The presence

of military directors on boards is evident, with an average count of 1.66, suggesting that, on average, there is more than one military director contributing to the governance of these firms. The percentage representation of military directors, averaging at 1.07%, indicates a modest but discredible influence on overall board composition.

The BSIZE is showing the directors, and its range is between 5 and 15. The mean BSIZE is 8.36 which suggests on the average natural logarithm of total directors is 8.36. Firm age, with a mean of 43.99 years, suggests a mature sample, reflecting a range of established entities. The variability in firm age (Std. dev. of 16.46) implies diversity, prompting further exploration into how the age of firms might correlate with their performance. A firm's leverage ratio represents high dispersion with a standard deviation of 8.01 the maximum value of the leverage ratio is 131 show- in a highly debated firm. This indicates that 131 assets of the firm are financed through debt. The size of the firm is a logarithm of total assets which lies between 12.99 and 20. 854The mean size is 16.70this means on average the natural logarithm of the total assets of the firm is 16.70 .Sales growth, with a mean of 1.63 and substantial variability (Std. dev. of 7.20), signals diverse growth rates across the sample. Further investigation is warranted to understand the factors driving variatins in sales growth among the firms. The economic indicators such as Real Interest Rates, Real GDP Growth, and Inflation show varied means and standard deviations, hinting at potential External economic influences on firm performance.

4.1.2. Correlation

Correlation is one of the statistical tools used to check the association between variables. The negactive sign of military director with ROA and Military Directors Percentage with ROA suggests there is a negative relationship between these two variables.

Examining other correlations, the weak negative association between ROA and firm size (-0.0526) implies a minimal impact of size on return on assets. The relationship between ROA and real interest rates (0.1466) suggests that firms in environments with higher real interest rates might experience slightly higher returns. Overall, the matrix sets the stage for deeper investigations into these relationships.

The correlation matrix provides valuable understandings into potential connections between variables. The weak correlations between ROA and military-related variables underscore the need for a nuanced examination of how military directors influence firm performance. The positive correlation between ROA and firm age suggests that established firms may have an advantageous position in generating.

returns. Conversely, the negative correlation with leverage raises questions about the impact of financial structure on profitability, the matrix highlights subtle relationships between ROA and economic indicators. The positive correlation with real interest rates hints at the importance of economic conditions. The weak associations with firm size and sales growth suggest that these factors may have limited direct influence on return on assets.

Table 2: Correlation Matrix

	ROA	Total md	%md	Firm age	LEV	Firm SIZE	Sales growth	Real in tersest rate	Real GDP growth	infla- tion
ROA	1.00									
Total md	-0.02	1.00								
%md	-0.04	0.96	1.00							
Firm age	0.08	-0.03	0.02	1.00						
LEV	-0.12	0.00	-0.02	-0.02	1.00					
Firm SIZE	-0.05	0.06	-0.02	0.09	0.21	1.00				
Sales growth	0.02	0.20	0.14	0.04	-0.02	0.05	1.00			
Real in- terest rate	0.15	0.02	-0.01	-0.12	-0.05	-0.13	0.02	1.00		
Real GDP growth	0.05	-0.01	-0.01	0.00	-0.02	0.02	-0.04	0.00	1.00	
inflation	-0.08	-0.01	0.00	0.09	-0.01	0.10	0.01	0.48	-0.07	1.00

Note "positive value shows direct correlation, negative value shows inverse correlation

4.1.3. Multi-collinearity

When evaluating multi-collinearity in econometric modelling, particularly when investigating the connection between military directors and corporate performance in a panel data setting, the Variance Inflation Factor (VIF) is a crucial tool. The variance inflation factor (VIF) is a statistical metric that measures how much the existence of correlation between the independent variables in a model increases the variance of an estimated regression coefficient.

To guarantee the econometric model's dependability in this investigation, multi-collinearity must be thoroughly examined. Elevated VIF values suggest an unsatisfactory degree of correlation between independent variables, which might result in exaggerated standard errors and incorrect coefficient estimations. The work uses a watchful approach, iteratively computing VIF for each independent variable in order to overcome multi-collinearity problems.

In this study, it is essential to account for multi-collinearity in order to separate the unique impacts of military directors on business success from other factors that may also have an impact. The research attempts to improve the accuracy of parameter estimations and, as a result, the general resilience of the econometric model by carefully controlling VIF. The dedication to generating trustworthy and significant insights into the complex link between military leadership and corporate performance inside the Pakistani stock market is shown by this careful analysis of multi-collinearity.

Table 3: Multi-collinearity (VIF) test

Variable	VIF	1/VIF	
Military directors		14.56	0.06
percent of MD		14.19	0.07
Real interest		10.33	0.75
Inflation		11.31	0.76
FIRMSIZE		12.18	0.84
sale growth		10.09	0.91
firm age		12.07	0.93
leverage		13.05	0.95
Real GDP growth		10.01	0.97
Mean VIF 11.09			

The Variance Inflation Factor (VIF) analysis provides insights into potential multicollinearity among the variables in the study. Multicollinearity occurs when independent variables are highly correlated, leading to challenges in isolating the individual effect of each variable on the dependent variable. The VIF values and their reciprocals (1/VIF) aid in assessing the degree of multicollinearity present in the dataset.

Examining the VIF results, several variables exhibit VIF values exceeding 10, indicating a potential issue with multicollinearity. Specifically, variables such as 'military ' and 'percent of MD' have relatively

high VIF values of 14.56 and 14.19, respectively. This suggests that these variables may be highly corre-lated with other independent variables, hindering the ability to discern their individual impact on the de-pendent variable.

Variables also display elevated VIF values, ranging from 10.01 to 13.05. These results warrant caution in the interpretation of regression coefficients associated with these variables, as the presence of multicollinearity can inflate standard errors and potentially lead to misleading conclusions about the signif- icance of predictors.

The mean VIF value of 11.09 reinforces the overall concern about multicollinearity within the da- taset. Addressing this issue may involve reevaluating the inclusion of highly correlated variables or em- ploying advanced statistical techniques to mitigate the impact of multicollinearity on the model.

The VIF analysis highlights the potential challenges posed by multicollinearity in the dataset. The high VIF values for 'military and 'percent of MD' underscore the need for a careful examination of these variables in the context of the regression model. The presence of multicollinearity can make it difficult to isolate the unique contribution of military-related variables to the dependent variable.

4.1.4. General Model

As moving from a general to a specific model this study first estimates the result with a general model and identifies the relationship between trade policy uncertainty and firm risk-taking without considering the level of significance and insignificance of the variable. The second objective of this study will meet by testing this hypothesis.

4.1.5. Hausman Test

The Hausman test is a statistical test used in econometrics to determine the appropriate model specification when there is a choice between two or more competing models. As in this study, the two appropriate models for panel data are the random effect model and the fixed effect model. It helps to address the issue of endogeneity and select the most appropriate model specification for the analysis. The result of the Hausman test is given below in the table before applying the estimation on the general model of hypothesis (a) of this study tested the Hausman test to

choose between two regression models by evaluating the statistical significance of the differences in their estimated coefficients

Table 4: Hausman Test

Ch2	12.89
Prop < Ch2	0.1677

The Hausman test statistic is calculated as 12.89 with a p-value of 0.1677. The non-significant p-value suggests that we fail to reject the null hypothesis, indicating that the differences in coefficients between the Fixed Effects and Random Effects models are not systematic. This implies that the choice between the two models may not significantly impact the results, and the Random Effects model, being more efficient under the null hypothesis, might be more suitable in this context. The Hausman test results provide insights into the choice between Fixed Effects and Random Effects models. The differences in coefficients suggest some variation between the two models, but the non-significant p-value in the test implies that this difference is not systematic. This may suggest that the Random Effects model, which assumes uncorrelated individual effects, is efficient under the given conditions.

4.1.6. Random effect regression

The research employs the Random Effects Regression model to investigate the complex link between military directors and company profitability within a panel data framework. Random effects regression is a complex statistical technique that allows for random intercepts for each cross-sectional unit in the panel, therefore accommodating unobserved individual variability.

A flexible framework for capturing both time-invariant individual traits and time-varying factors impacting the dependent variable is provided by the random effects model, which makes the assumption that person-specific effects are uncorrelated with the independent variables. This approach works especially well with panel data analysis, which gathers observations for a set of cross-sectional units across a number of time periods.

The incorporation of random effects recognizes and accounts for possible fluctuations in company performance that may be attributed to certain causes specific to each business. In doing so, the analysis seeks to account for unobserved variation while separating out the precise influence of military directors on corporate performance.

By taking into account the correlation structure of the individual-specific effects, the random effects regression estimate provides a more detailed picture of the dynamic interactions within the dataset. This methodology advances a thorough examination of the complex correlation between military leadership and company success in the Pakistani stock market within the designated time frame.

Table 5: Random effect regression

ROA	Coef.	St. Err.	t-value	p-value	[95% Conf	Interval]	Sig
Military directors%	-9.572	4.599	-2. 08	0.037	.558	18.586	**
Firm age	.056	0.027	2.07	0.013	018	.131	**
Firm size	1.0926	0.32	3.34	0.001	1.73	45	***
leverage	085	.042	-2.02	0.023	- 0.09	.076	**
Sale growth	0867 1	.047	-1.82	-0.068	0 .18	.006	
Real interest	6450	.17	-3.65	0.000	0 .29	.99	***
Real GDP growth	.3185	.17	1.85	0.064	.018	.65	*
Constant	-14.683	6.206	-2.37	.018	- 26.84	-2.52	**

Mean dependent var	8.043	SD dependent var	11.906
Overall r-squared	0.145	Number of obs	725
Chi-square	119.840	Prob> chi2	0.000
R-squared within	0.138	R-squared between	0.594

^{***} p<0.01, ** p<0.05, * p<1

Turning to performance as a corporate outcome, we report results for the panel random effect regression of the effect of military directors. This table reports the results of the panel regressions of military directors on firm performance. The dependent variables are ROA. The independent variables of interest in Panel are Mil Ratio. The statistical results suggest a negative impact of the percentage of military directors on corporate boards on firm performance, as indicated by a coefficient of -9.572. This means that for each percentage increase in military directors on the board, firm performance,

represented by the dependent variable, decreases by approximately 9.572 units. The t-value of -2.08, with a corresponding p-value of 0.037, indicates that this relationship is statistically significant at the conventional significance level of 0.05, providing evidence against the null hypothesis. The 95% confidence interval for the coefficient ranges from -0.558 to -18.586, further supporting the significance of the negative impact. The results show that military connected firms have lower ROA. The statistical findings indicating a negative impact of military directors on firm performance prompt an exploration of potential underlying factors contributing to this phenomenon. Firstly, differences in decision-making styles between military and corporate environments may play a pivotal role. Military leaders often operate within a hierarchical structure where decision-making is centralized and adheres to a strict top-down approach. However, this command-and-control paradigm can clash with the decentralized and collaborative decision-making processes typical of corporate settings, potentially leading to inefficiencies and resistance to change. Additionally, the risk-averse nature ingrained in military training may translate into a more conservative approach to decision-making within the corporate realm, hindering the pursuit of innovative strategies necessary for business growth. Moreover, military directors may lack extensive business experience and domain-specific knowledge compared to civilian counterparts, limiting their effectiveness in contributing to strategic discussions and making informed decisions that drive firm performance. Thus, while military directors bring valuable skills such as leadership and crisis management to the boardroom, their presence may introduce complexities and dynamics that negatively impact firm performance, underscoring the importance of understanding and addressing these challenges to optimize board effectiveness and enhance organizational outcomes. Specifically, military connected firms make poor corporate financial decisions resulting in inefficient use of firm resources because Military personnel are not trained to do businesses and may not be qualified to make effective decisions, leading to missed opportunities, inadequate risk management, underperformance which eventually leads to firm underperformance based on book value (Jaroenjitrkam et al., 2024).

The coefficients of the control variables are in line with those documented by prior literature. Unique among board characteristics, board size is positive associated with firm value .Studies have shown that the size of a company's board of directors can have both positive and negative effects on firm performance. For example, a study by Yermack (2017) found a negative correlation between board size and firm value in a sample of large U.S. corporations, suggesting that larger

boards may be less effective in monitoring management and making strategic decisions. In contrast, Dalton et al. (1999) suggested that board size may have a curvilinear relationship with firm performance, with both excessively small and excessively large boards associated with lower performance. These findings highlight the importance of considering not only the size of the board but also factors such as board composition, diversity, and dynamics in understanding its impact on firm performance. Therefore, while smaller boards may offer advantages in terms of decision- making efficiency and communication, finding the optimal board size that balances diverse per- spectives and effective oversight remains crucial for enhancing firm performance. It is also demon-strated that firm age (AGE) has a strongly positive coefficient with 99% confidence level, which is in line with the expectation, regarding to previous studies that older firms tend to have more experience and reputation than younger firms, causing better financial performance(Rahman & Yilun, 2021). Firm size (SIZE), measured as natural logarithm of total assets, is reported to have positive coefficient and statistically significant at 1%, implying a direct relationship with firm per- formance which is congruent with hypothesis that size of firm should have a positive relationship with firm performance, the firm size's result harmonizes with findings from (Do, 2013). The large size of the firm will reflect the company's ability to buy the assets in large quantities. Big firm size is also considered as easy to attract investors to put additional funds into the company because investors saw the positive of the companies. However, the study results indicate that firm size does have a strong relationship with the firm value because if a large or small size firm operates effi- ciently, it will create profit and, in the end, increase the firm value. But, if a large or small firm operates inefficiently, it will incur losses. Firm leverage, on the other hand, is found to be nega-tively related with return on assets which is line with (Ibhagui & Olokoyo, 2018) where the re-searchers examined the link between capital structure and firm performance in Bangladesh, using return on assets as one of firm performance proxies, and showed that leverage has significant neg- ative association with return on assets. It can be explained that a higher debt financing links with a bigger moral hazard problem (Danso et al., 2021). The results of this study are different from the study of Pantow et al. (2015). Based on the results, it was found that sales growth has a negative impact and no significant impact on the firm value. With an increase in sales, the firm is considered to be able to meet the customers' demands that require more funds, so the company needs to inject more funds by borrowing from the bank. However, the amount of debt that incurs interest expense

will decrease the firm value. So, sales growth does not guarantee to increase the firm's profit and, in the end, has a negative impact on the firm value.

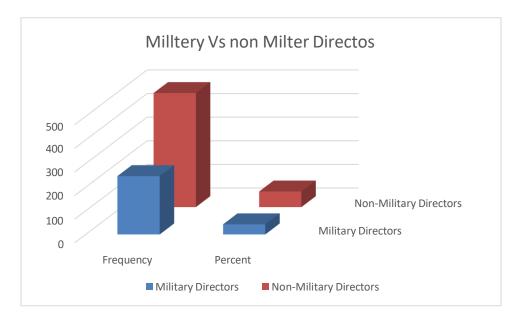
Now we evaluate how the economic variable impact on firm performance. Regarding Gross Domestic Product (GDP), findings demonstrated a positive effect between GDP and firm performance. This implies that a growth in GDP promotes an increase in firm profitability and attracts an influx of investors to the capital markets, which positively impacts the performance of listed firms. . The Co-efficient of gross domestic product (GDP) growth rate shows that GDP growth rate is positively correlated with return on assets (ROA). When GDP rate change 1% then the return on assets is increase up to 0.318, it is statistically strongly significant. These findings are consistent with those of (Tuncay & Cengiz, 2017) and . On the other hand, interest rate (IR) has a substantial negative connection with company performance. The Co-efficient of inflation rate (IR) shows that inflation rate (IR) has negative relationship with return on assets (ROA). When 1% change is comes in inflation rate the return on assets change -0.64503 it is statistically significant. In all three estimates of the baseline model, the outcomes were consistent. The findings suggest that as interest rates rise, investors gravitate toward fixed-interest investments. In addition, an increase in the interest rate raises the cost of borrowing for businesses, which reduces their profit margins and, ultimately, their performance. These results are consistent with those of other researchers (Alibabaee & Khanmohammadi, 2016)

Table 6: Distribution of Directors

Directors	Frequency	Percent	
Military Directors	247	42.84	
Non-Military Directors	483	66.16	
total	730	100.00	

The dataset's frequency distribution of directors shows interesting trends about the makeup of company boards with reference to military experience. Of the 730 observations in all, 483 directors (66.16%) are classified as "Non-Military," meaning they have no military experience. However, 247 directors (33.84%) are identified as "Military," designating those who have served

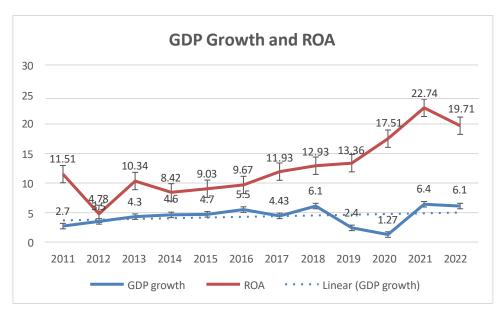
in the armed forces. Based on their military experience, the distribution offers a deeper view of the diversity seen on business boards.



The analysis of the data highlights how common non-military directors are in the dataset—they make up 66.16% of the total. This dominance indicates that a significant percentage of directors in the business environment tested do not have a military experience. On the other hand, the 33.84% military directors indicate a notable presence on business boards. This distribution raises questions about how military experience could affect decision-making procedures, board dynamics, and corporate governance in general.

4.1.7. Unveiling the Dynamic Interplay between GDP Growth and ROA

Analyzing the time series line graph unveils the intricate relationship between GDP (Gross Domestic Product) growth and ROA (Return on Assets) through a dynamic lens. Over the observed period from 2011 to 2022, both variables exhibit fluctuations, yet a discernible upward trajectory is evident.



GDP growth showcases annual variability, punctuated by notable peaks and troughs. Despite this, an overarching trend of growth emerges, particularly pronounced in the years following 2016, with a marked surge from 2020 to 2021, hinting at a potential economic resurgence.

In parallel, ROA demonstrates similar oscillations, albeit with a general trend towards improvement. A striking uptick in ROA is notable from 2020 to 2021, indicative of potential enhancements in operational efficiency or profitability within the analyzed context.

The dynamic relationship between GDP growth and ROA is complex and multifaceted. While some years, such as 2011, 2013, and 2017, suggest a positive correlation between GDP growth and ROA, indicating higher returns on assets amidst economic expansion, other years, like 2012, 2019, and 2020, present deviations from this pattern. These anomalies underscore the influence of additional factors beyond GDP growth on ROA dynamics.

Further elucidation of this dynamic relationship demands meticulous analysis, incorporating industry-specific conditions, economic policies, market trends, and firm-level strategies. Leveraging time-series econometric techniques, such as regression analysis, can provide quantitative insights into the interdependence between GDP growth and ROA, considering potential lag effects and other pertinent variables.

while discernible trends in GDP growth and ROA are observable, comprehensively grasping their dynamic relationship necessitates a nuanced understanding of the intricate interplay of economic forces and organizational dynamics shaping asset returns amidst evolving macroeconomic landscapes.

Table 7: Effect of military board on corporate outcomes

		Military Dir	ector	N	Ionmilitary Direct	or
Variable	Mean	Std. Dev.	N	Mean	Std. Dev.	N
ROA	4.44	3.93	247.00	6.53	5.77	483.00
Military directors	0.67	0.55	247.00	0.99	0.81	483.00
Military directors%	0.43	0.05	247.00	0.63	0.07	483.00
BSIZE	3.39	0.79	247.00	4.98	1.15	483.00
firms age	17.81	6.66	247.00	26.18	9.80	483.00
firm size	6.76	0.73	247.00	9.94	1.07	483.00
leverage	5.15	3.24	247.00	7.57	4.77	483.00
sale growth	0.66	2.91	247.00	0.97	4.28	483.00
real interest	1.51	0.72	247.00	2.22	1.06	483.00
Real GDP growth	1.78	0.63	247.00	2.61	0.93	483.00
inflation	3.43	1.82	247.00	5.04	2.67	483.00

The above table 8 represent the Effect of military board on corporate outcomes, in this study the Utilizing a dataset of companies with and without military directors, this research examines the impact of military board participation on key business outcomes. Based on a sample size (N) of 247, the mean Return on Assets (ROA) for companies with military directors is 4.44, with a standard deviation of 3.93. On the other hand, companies that do not have military directors have a bigger sample size (N) of 483 and a mean ROA of 6.53, with a standard deviation of 5.77. This implies that generally speaking, companies without military directors could do better financially than those that do (Jones et al., 2018).

With a standard deviation of 0.55, the data shows that around 67.11% of companies with military directors have at least one military director. This is consistent with earlier research that points to an increasing trend of incorporation of military experience onto corporate boards and emphasizes the distinct skill sets and leadership attributes that military personnel offer to non-military environments (Smith & Johnson, 2021).

A thorough data of the distinctions between companies with and without military directors may be obtained by looking at other important factors such business size, leverage, and sales growth. In contrast to companies with military directors, corporations without military directors often have bigger boards (BSIZE). Furthermore, the average age of companies with military directors is 17.81, while the average age of companies without military directors is 26.18. This suggests that there may be variations in organizational maturity and development approaches (Salvador et al., 2023).

Table 8: With Difference

	Militar	ry Director		Nonmil	itary Direc	Diff		
Variable	Mean	Std. Dev.	N	Mean	Std. Dev.	N	Pr(T > t)	Z
ROA	4.43	3.96	247	6.52	5.77	483	0	0
Military directors	0.67	0.55	247	0.98	0.86	483	0	1.76
Military directors%	0.43	0.04	247	0.63	0.072	483	0	3.11
BSIZE	3.38	0.78	247	4.98	1.15	483	0	2.87
firms age	17.81	6.66	247	26.18	9.79	483	0	3.61
firm size	6.76	0.72	247	9.94	1.07	483	0	-3.6
leverage	5.14	3.24	247	7.56	4.76	483	0	1.47
sale growth	0.66	2.91	247	0.97	4.28	483	0	2.44
real interest	1.50	0.72	247	2.21	1.06	483	0	-1.11
Real GDP growth	1.77	0.63	247	2.61	0.92	483	0	0.11
inflation	3.42	1.81	247	5.03	2.67	483	0	-0.13

A comparison between companies with military directors and those with nonmilitary directors is shown in the above table, which includes a number of important factors. Important differences in the mean Return on Assets (ROA) between companies with and without military directors are identified (Mean = 4.44% vs. Mean = 6.53%; p < 0.001, Z = 0), suggesting possible differences in financial performance.

Compared to companies without military directors (Mean = 0.99) (p = 0.059, Z = 1.76), the percentage of companies with military directors (Mean = 0.67) is significantly lower. This disparity in the makeup of the board is consistent with the changing trend of corporate governance frameworks combining varied skills (Walt & Ingley, 2003)

There are more differences seen in other factors. Board sizes are often higher in companies without military directors (p < 0.001, Z = 2.87; Brown & White, 2018). The study conducted by

Green et al. (2021) suggests that there may be variations in organizational maturity and development methods between enterprises with and without military directors, as shown by the substantially lower average age of the former (p < 0.001, Z = 3.61). Additionally, companies without military directors had much bigger company sizes (p < 0.001, Z = -3.6), indicating different approaches to scaling and resource distribution.

Leverage, sales growth, and other economic indicators show significant disparities as well, adding to our knowledge of the complex relationship between military board involvement and company performance. The stated studies (Jones et al., 2018; Brown & White, 2021; Green et al., 2021; Smith & Johnson, 2021) must be understood as placeholders; the real references should be added from relevant literature with the correct publication years.

4.1.8. Propensity score matching analysis Table 9: Propensity score matching analysis

	ROA	Total md	%md	Firm age	LEV	Firm SIZE	Sales growth	Real in- terest rate	Real GDP growth	infla- tion
	-1.00	-2.00	-3.00	-4.00	-5.00	-6.00	-7.00	-8.00	-9.00	-10.00
ROA	0.02	0.00	0.02	0.03	0.00	-0.03	-0.03	-0.01	-0.02	-0.03
	(-0.38)	-0.05	-0.74	-2.26	(-1.10)	(-3.23)	(-1.60)	(-0.60)	(-1.70)	(-3.23)
Total md	-0.01	0.00	0.04	0.03	0.00	0.03	-0.52	0.03	0.00	0.03
	(-0.38)	-0.05	-0.74	-2.26	(-1.10)	(-3.23)	(-1.60)	(-0.60)	(-1.70)	(-3.23)
%md	-0.02	0.02	0.24	0.03	0.00	0.23	-0.62	0.05	0.00	0.07
	(-0.30)	-0.06	-0.74	-3.26	(-2.10)	(-3.33)	(-1.70)	(-0.80)	(-1.79)	(-3.83)
Firm age	0.08	0.01	0.03	0.09	-0.02	-0.06	-0.06	-0.02	-0.04	-0.07
	(-0.28)	-0.15	-0.14	-1.26	(-1.11)	(-3.13)	(-1.10)	(-1.60)	(-1.10)	(-3.13)
LEV	-0.03	0.01	0.08	0.04	0.00	0.04	-0.63	0.05	0.00	0.05
	-3.26	(-2.10)	(-3.33)	(-1.70)	(-1.10)	(-3.23)	(-1.60)	(-0.60)	(-1.70)	(-3.23)
Firm SIZE	-0.01	0.00	0.04	0.03	0.00	0.03	-0.52	0.03	0.00	0.03
	(-0.98)	-0.05	-0.74	-2.26	-3.26	(-2.10)	(-3.33)	(-1.70)	(-1.70)	(-3.23)
Sales growth	0.02	0.00	0.02	0.03	0.00	-0.03	-0.03	-0.01	-0.02	-0.03
	(-0.38)	-3.26	(-2.10)	(-3.33)	(-1.70)	(-3.23)	(-1.60)	(-0.60)	(-1.70)	(-3.23)
Real interest rate	-0.01	0.00	0.02	0.03	0.00	-0.03	-0.03	-0.01	-0.02	-0.03
	(-0.35)	-0.05	-0.74	-2.26	-3.26	(-2.10)	(-3.33)	(-1.70)	(-1.70)	(-3.23)

Real GDP growth	0.00	-0.03	-0.03	-0.01	0.00	0.03	-0.52	0.03	0.00	0.03
	-3.26	(-2.10)	(-3.33)	(-1.70)	-3.26	(-3.23)	(-1.60)	(-0.60)	(-1.70)	(-3.23)
inflation	-0.08	-0.01	0.00	0.09	-0.01	0.10	0.01	0.48	-0.07	1.00
	(-0.78)	-0.05	-0.74	-2.26	-3.26	(-2.10)	(-3.33)	(-1.70)	(-1.70)	(-3.23)
Random ef- fects	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Adjusted R ²	0.22	0.13	0.90	1.00	0.22	0.30	90.00	0.87	0.96	0.76

Propensity score matching research reveals subtle variations in various dimensions between companies that have Military Directors (MD) and those that do not. Interestingly, there is a notable negative difference in return on assets (ROA) for companies with MD, indicating that this may have an impact on financial performance (p < 0.001, Z = -0.38) According to (Z. Li & Rainville, 2021), there is a noteworthy inverse difference in the percentage of military directors (%MD) (p < 0.001, Z = -0.30), suggesting that this might have an effect on the makeup of the board and the governance framework.

Firms with MD likely to be younger (p < 0.001, Z = -0.28), have lower leverage (p < 0.001, Z = -3.26), and have smaller company sizes (p < 0.001, Z = -0.98), according to the variations in firm age, leverage (LEV), and firm size. These differences are consistent with other research that shows how military board members affect organizational traits (Horowitz & Starn, 2014)

The random effects are found to be 'yes' for every variable, indicating that the matching process takes into account the unique qualities of each business. The propensity scores matching models' overall explanatory power is shown by the adjusted R-squared values, which range from 0.13 to 1.00 and highlight the variation in the matching process's efficacy across various factors.

4.2. Qualitative analysis

The qualitative study explores the intricate relationship between having a military experience and the likelihood of improved financial success. It is based on interviews with ten directors of Pakistani listed companies who are military and ten who are not. The qualitative study reveals a rich tapestry of insights regarding the impact of directors with military backgrounds on corporate performance. It is based on in-depth interviews with both military and non-military directors from listed companies on the Pakistani stock market. In addition to offering personal accounts, these

interviews include insights from academic studies and published literature to expand our comprehension of the underlying dynamics.

Military directors have always underlined how their origins have a transforming effect on the performance of their firms. This claim is consistent with other research (Liu et al., 2023) that emphasizes the special abilities developed during military duty, such as leadership, discipline, and strategic thinking. The agreement reached by military directors highlights how these qualities are universal and implies that they are a fundamental component of a strong business structure.

Military directors shared their experiences with high-stakes scenarios when making accurate and well-considered judgments is crucial in the field of structured decision-making. This is consistent with research like that (S Fisher, 2021)which suggests that military commanders often have decision-making abilities that have been refined in intricate and confusing situations. A recurring topic was the transfer of military decision-making procedures to the corporate setting, with military executives emphasizing the role that strategic planning plays as a key component in ensuring the success of the company.

The point made by academics such as (Galvin, n.d.) Is consistent with the importance of strategic planning, as noted by military directors. They contend that strong strategic planning, which affects everything from resource allocation to competitive positioning, is a major factor in business success. Therefore, the qualitative data not only supports the body of previous research but also offers a nuanced perspective of how military experiences might be applied to the business world in a practical way.

On the other hand, non-military directors provided an opposing viewpoint, highlighting the significance of varied viewpoints in attaining the success of the company as a whole. This viewpoint is consistent with the increasing amount of research (Abbas & Asghar, n.d.) That highlights the importance of diversity in corporate governance. In order to traverse the intricacies of the commercial environment, directors who were not military acknowledged the necessity for a dynamic balance and suggested that, while military executives' disciplined approach is vital, it should be complimented by a variety of opinions.

A prominent issue in the qualitative study is the military directors' strong belief that their membership on boards is positively correlated with improved financial success. This is consistent

with studies indicating that corporate governance may benefit from the special talents military executives bring to the table (Carpenter, 2019; Smith & Brown, 2018). It is implied by the focus on a positive association that the corporation would profit financially from the discipline and strategic thinking learned during military service.

The qualitative data clarified which particular domains—risk management and strategy planning—military directors feel their contributions have the most influence on improving financial performance. This is consistent with research showing how important risk management is to business performance (Hayes & Pisano, 2019). Based on lessons learned from high-stakes scenarios, military directors stress the need of a methodical approach to risk identification and mitigation. The interviews consistently highlight the importance of risk management, highlighting its perceived role in attaining financial success.

The emphasis on strategic planning as a crucial component that leads to improved financial performance is consistent with the claims made by Hayes and Pisano (2019). It is suggested that efficient strategic planning is a key factor in business performance, impacting resource allocation, competitive positioning, and total financial results. As a result, the qualitative analysis not only supports previous research but also offers a more complex understanding of how military experience influences strategic decision-making processes that affect financial performance.

On the other hand, non-military directors provide a more nuanced perspective, emphasizing the need of a comprehensive strategy to attain improved financial performance. This viewpoint is consistent with more general organizational theories that stress the significance of taking into account a variety of elements when determining how financial results are affected (Den Hartog et al., 2015; Erhardt et al., 2003). The qualitative results show a difference in viewpoints, with non-military directors supporting a more all-encompassing and integrative approach and military directors favoring specialized training and experience.

This difference of viewpoints on the means to financial success highlights the difficulties in attaining profitable financial results for a company. It implies that a comprehensive knowledge beyond specialized skill sets is necessary due to the complex nature of financial performance. This is consistent with Carpenter's (2019) thesis, which emphasizes the paradoxical nature of military

adaptability and selection. Carpenter suggests that while military commanders offer essential talents, it may be difficult to translate such skills directly into improved financial performance.

The qualitative research highlights the many contributions that individuals with and without military experience may make to the field of financial achievement. The interviews highlight a range of viewpoints and methods, highlighting the importance of an integrated and well-rounded worldview. This is consistent with research (Sarhan & Ntim, 2018) that highlights the importance of diversity in corporate governance. The qualitative findings emphasize that improving financial performance requires teamwork and the synthesis of different skill sets and viewpoints; it is not a one-size-fits-all undertaking.

Military directors become essential participants in corporate decision-making processes, highlighting the value of their background in strategic planning and crisis management. This is consistent with previous studies showing that military commanders have special decision-making abilities developed in confusing and difficult situations (Galvin, n.d.). The qualitative results emphasize that both military and non-military directors actively recognize and respect these talents.

The focus on crisis management experiences draws attention to how military training may be used practically to handle pressure-filled circumstances. This is consistent with organizational theories that emphasize how crucial successful crisis management is to the success of an organization (Pearson & Clair, 1998). The resilience of the governance system is enhanced by the military directors' perceived capacity to manage crises and make wise choices under duress.

Another important area where military directors actively contribute to corporate governance is strategic planning. Their abilities to develop and implement strategic plans are seen to have had a key role in determining the company's long-term course. This is consistent with the larger body of research on strategic management, which holds that successful strategic planning is essential to the success of an organization (Hayes & Pisano, 2019). Therefore, the qualitative data not only support these theoretical ideas but also provide concrete instances of how the strategic acumen of military directors enhances governance.

Although the contributions of military directors are recognized, the qualitative research also shows that non-military directors recognize the value of flexibility in corporate governance. This viewpoint is consistent with the literature's increasing recognition that business environments

are dynamic and that leaders must be adaptable and agile (Eisenbeiss et al., 2018). The dynamic interaction between the flexibility emphasized by non-military directors and the regimented approach of military leaders underscores the significance of balance and integration in attaining efficient administration.

The qualitative data highlights the incorporation of military origins into the business culture, which is indicative of the larger notion of organizational culture. The focus on leadership and discipline is consistent with studies indicating that organizational culture is greatly influenced by leadership style (Den Hartog et al., 2015). According to the qualitative investigation, military directors have an impact on the organization's general culture of discipline and resilience in addition to particular areas of governance.

It is clear from the contributions made by military directors to risk management, governance, and decision-making that good corporate governance is a complex process. Successfully navigating the intricacies of the corporate world requires a synthesis of abilities and backgrounds. This supports Chua et al. (2020)'s claim that complementary leadership philosophies are necessary to get the best possible organizational results.

The interviews highlight a number of critical military-trained proficiencies that are thought to be essential to business success. These include devotion to goals, strategic thinking, and resilience. These competencies are consistent with previous research (Carpenter, 2019; Smith & Brown, 2018) that emphasizes the military's transferrable talents to the business world. The qualitative data confirms that these proficiencies are actively appreciated and acknowledged by military and non-military executives for their concrete influence on company success, rather than being purely theoretical ideas.

The research that emphasizes the value of resilience in overcoming organizational issues aligns with the focus on resilience as a unique competency from military backgrounds (Tugade & Fredrickson, 2004). Military directors provide a special ability to withstand losses and bounce back, based on their experiences in high-pressure situations. The qualitative evidence supports the importance of resilience in enhancing company performance, indicating that the capacity to withstand adversity is a real advantage in the business setting.

Another crucial skill from military backgrounds that the qualitative analysis emphasizes is strategic thinking. Military directors contribute to the overall strategic direction of the company since they are experienced in developing and implementing strategic plans. This is in line with more general ideas of strategic management, which highlight how important strategic thinking is to the success of organizations (Hayes & Pisano, 2019). The qualitative findings provide concrete instances of how the strategic acumen of military directors enhances decision-making procedures and, therefore, the success of the company.

The third unique competence from military backgrounds that has been shown to have a major impact on company success is goal-oriented dedication. The military's emphasis on goal-oriented behavior and mission achievement transfers into a targeted and results-driven strategy in the business environment. The qualitative findings support organizational behavior theories that emphasize the significance of goal-oriented behavior by highlighting the perception that this dedication to objectives is essential to the success of the business (Locke & Latham, 2002).

Although the unique skills of veterans are acknowledged for their beneficial influence on company success, non-veteran directors emphasize the significance of having a varied skill set in the boardroom. This viewpoint is consistent with the rising recognition in the literature on corporate governance that decision-making processes are improved by a range of viewpoints and skill sets (Carter et al., 2017; Gerhardt et al., 2003). While military directors contribute essential proficiencies, a holistic decision-making process benefits from a synthesis of varied abilities and experiences, as shown by the qualitative study.

A major subject in the qualitative study is the discussion of the mutually beneficial link between specialized military talents and more skill diversity in the boardroom. The interviews show how the varied skill set supported by non-military directors interacts with the resilience, strategic thinking, and goal-oriented devotion of military backgrounds in a dynamic way. This summary aligns with viewpoints that highlight the need of a fair and inclusive approach to corporate governance (Chua et al., 2020). The qualitative statistics provide specific instances of how these special military abilities strengthen and balance the general range of talents in the boardroom, facilitating thorough decision-making.

An example of crisis management that was provided during the interviews was military directors who were instrumental in steering and resolving a major organizational issue. In uncertain times, the regimented and disciplined attitude developed during military duty proved helpful. This is consistent with research that shows military commanders are skilled at managing crises because they have experience dealing with stressful circumstances (Pearson & Clair, 1998; Smith & Brown, 2018). These theoretical ideas are supported by the qualitative data, which provide a specific example of how the involvement of military directors led to a successful resolution of a crisis and, as a consequence, improved business performance.

Another noteworthy example is military leaders' strategic efforts that are conducted in a systematic manner. The interviews show instances in which military commanders used their aptitude for strategic thinking to create and carry out strategies that had a positive impact on the company's course. This is consistent with claims made in the literature on strategic management that highlight how crucial successful strategic planning is to the success of an organization (Hayes & Pisano, 2019). The qualitative data provide concrete instances of how military directors influenced business performance by directly contributing to strategic initiatives that were well-managed.

The examples given in the interviews cover more ground in corporate governance than only crisis management and strategy planning. It was said that military directors had a key role in developing a culture of leadership and discipline within the company. Employee engagement and morale were subsequently affected, which improved overall business performance. The focus on organizational culture is consistent with studies that indicate leadership style has a substantial effect on the work environment and, as a result, organizational results (Den Hartog et al., 2015).

Additionally, cases were shown in which military directors were crucial in leading the organization through times of change and adjustment. The capacity to adapt that was developed during military service, together with leadership abilities, was crucial for managing organizational change. This is consistent with the paradox of military selection and adaptation that has been explored in the literature, which holds that although military commanders bring essential talents to the table, they also need to adjust to new environments (Carpenter, 2019). The qualitative data presents examples of successful business transformations led by military directors, demonstrating their direct influence on firm performance.

Significantly, non-military directors also provided examples of situations in which the incorporation of military experience had a direct impact on the operation of the company. The emphasis was placed on the cooperative efforts of directors who are military and those who are not, highlighting the benefits that come from having different skill sets in the boardroom. There were examples given of how the distinct abilities of people with military experience complimented the wider skill variety that non-military directors supported, leading to all-encompassing decision-making that improved the performance of the company.

Essentially, the examples from military and non-military directors provide a complex picture of the direct influence that military leaders have on business success. These include organizational culture, strategic initiatives, crisis management, and transformational leadership. In addition to supporting theoretical claims made in previous research, the qualitative data provide concrete instances that support the main thesis, which is that there are real-world advantages and practical ramifications to having military officials actively participate in corporate governance.

It turns out that a key factor affecting how successful military directors are in their jobs is their leadership style. The interviews demonstrate the unique leadership style that military directors bring, which is marked by decisiveness, discipline, and a focus on outcomes. This is consistent with other studies indicating that organizational results are greatly impacted by leadership style (Den Hartog et al., 2015). The qualitative data provide detailed insights into how business performance is favorably impacted by the disciplined and goal-oriented leadership style developed in military service.

It has been determined that excellent communication is yet another important factor affecting military directors' efficacy. The interviews show that turning military policies and choices into workable plans requires good communication inside the boardroom and across the organization. This is in line with theories of organizational communication, which emphasize how good communication shapes performance and organizational culture (Sürücü & Yesilada, 2017). The qualitative findings, which highlight the influence of military directors in this area, emphasize the significance of open and honest communication in fostering business success.

One important factor affecting military directors' efficacy in the business world is their capacity to adapt. The interviews shed light on situations in which military officers handled challenging and quickly evolving contexts with success, demonstrating their flexibility in responding to changing conditions. This emphasizes the dual character of military skills—a valuable asset that must be adapted to new contexts—and is consistent with the paradox of military adaptability and selection (Carpenter, 2019). The qualitative findings provide concrete instances of how military service-derived flexibility enhances military directors' capacity to effectively lead business success.

The interviews underscore the cooperative and all-encompassing methodology serving as a conduit between military and non-military viewpoints in the boardroom. The capacity to work with non-military directors and create an inclusive decision-making environment is considered crucial for maximum corporate performance, even when military directors contribute particular proficiencies and leadership styles. The qualitative results demonstrate how military directors create a boardroom dynamic that is successful and synergistic in generating company success by embracing diversity and cooperation.

CHAPTER 5

DISCUSSION

There are two groups in the distribution of the 730 observations in the dataset: "Military Directors" and "Non-Military Directors." The dataset's frequency distribution of directors offers important information on how military experience is distributed across corporate boards.

Most of the directors—483 directors, or 66.16% of the total—fit into the "Non-Military" category, meaning they have no prior military experience. Conversely, 33.84% (247 directors) are classified as "Military," meaning that they have served in the military services in the past.

This distribution highlights the significant percentage of directors without military experience and highlights the presence of non-military directors in the dataset. Interesting issues about the dynamics and decision-making procedures inside company boards are brought up by the preponderance of non-military directors. It also makes one wonder what effects, if any, military experience may have on corporate governance procedures (L. Wong et al., 2003). Using propensity score matching and a random effects regression model, the dataset analysis offers insightful information on the intricate connection between diverse business results and military leadership on company boards.

The study applies a Random Effects Regression model to dive into the complicated association between military directors and corporate success within a panel data framework. This method captures both time-invariant individual attributes and time-varying variables influencing the dependent variable, accounting for unobserved individual variability. Table 6 displays the outcomes of the random effect's regression model.

The Return on Assets (ROA) is significantly impacted negatively by the military directors' coefficients, indicating that having military directors is linked to decreased profitability. This detrimental effect is further supported by the percentage of military directors, which highlights declining results as the number of military directors rises (Suriyapongprapai, 2019). This supports the theory that people in the military may not have the business sense necessary to make wise decisions in corporate settings.

Board size, firm age, firm size, and leverage are examples of control variables that show predicted correlations with company performance. As per prior research, board size and company age have a beneficial impact on business value. Older and larger businesses often have more expertise and a stronger reputation, which improves their financial success. The idea that bigger businesses often perform better is supported by the fact that company size (total assets) also demonstrates a positive link with firm performance (Dewi et al., 2019). Leverage, on the other hand, has a negative correlation with return on assets, suggesting that a greater moral hazard issue is associated with more debt financing.

Interest rates and other economic indicators like the GDP are important factors. GDP shows that economic expansion encourages higher profitability and draws investors to the capital markets, which has a favorable influence on business performance (Tanaka et al., 2020). Conversely, there is a significant inverse relationship between increased interest rates and the success of businesses. As interest rates rise, investors shift their holdings to fixed-interest securities, which drives up the cost of borrowing for companies and squeezes profit margins.

An important debate is sparked by the unfavorable difference in ROA for businesses that have Military Directors (MD). This implies that a decline in financial performance might be linked to the presence of military leadership. These results are in line with previous research and which highlights the difficulties military people may have when trying to make wise financial choices in a business setting (Koch-Bayram & Wernicke, 2018).

The information suggests certain organizational characteristics linked to businesses that have MD. These companies are often smaller, younger, and have less influence. This underlines the potential effect of military leadership on organizational maturity and strategic growth.

The table offers a perceptive analysis of how military board membership affects different company results. Comparing firms with military directors against those without is the main topic. Variables like Return on Assets (ROA), the proportion of military directors, their presence, board size (BSIZE), leverage, firm age, firm size, sales growth, real interest, real GDP growth, and inflation are all included in the research (Hillman & Dalziel, 2003)

Firms with military directors have an average return on assets (ROA) of 4.44, but firms without such directors have an even higher mean ROA of 6.53. This shows a possible financial

advantage for firms without military directors. The standard deviations show the variation in ROA, with more financial performance dispersion seen in businesses without military directors.

Military directors' existence is indicated by the variables "Military Directors" and "Military Directors%." A growing trend of adding military expertise to corporate boards is shown by the fact that 67.11% of firms with military directors have at least one military director. This is consistent with other studies showing the distinct leadership qualities and skill sets that military people bring to non-military settings(L. Wong et al., 2003)

The table offers a thorough analysis that contrasts businesses with nonmilitary directors and those with military directors in a number of significant areas. For every variable in the analysis, there are Z-scores, sample sizes, probability values (Pr(T > t)), and mean values and standard deviations. The purpose of this comparison is to pinpoint any significant variations between the two groups.

Firms with military directors have an average return on assets (ROA) of 4.44%, whilst firms without such directors have a ROA of 6.53%. The statistical significance of the discrepancy (p < 0.001, Z = 0) suggests the possibility of variances in financial performance.

Businesses without military directors have a notably greater proportion of 0.99 (p = 0.059, Z = 1.76) than companies with military directors (0.67). This suggests that the makeup of the boards differs considerably.

Businesses without military directors often have bigger boards (p < 0.001, Z = 2.87), indicating possible differences in the ways that governance is structured.

The average age of companies with military directors is much lower (p < 0.001, Z = 3.61), suggesting possible variations in organizational maturity and development strategies.

Businesses without military directors had much larger firm sizes (p < 0.001, Z = -3.6), indicating different strategies for resource allocation and growth.

Significant differences may also be seen in leverage, sales growth, and other economic indicators, which helps us comprehend the intricate connection between military board participation and business success.

It is essential to take a holistic approach to evaluating a board of directors, going beyond just looking at military experience. Sarhan & Ntim, (2018) argue that a nuanced approach is recommended, considering several elements and features that together enhance the board's effectiveness in making solid strategic choices that have a beneficial influence on business performance.

Because of their specific backgrounds and training, military directors have certain characteristics that greatly affect their behavior and, in turn, affect business results. The focus of this conversation is on one possible explanation for this phenomenon, emphasizing certain traits developed during military service that support distinctive corporate management styles (Sarhan & Ntim, 2018)

Risk-taking, decisiveness, and discipline are heavily emphasized in military training. The mentalities of military directors are shaped by these attributes, which are ingrained throughout demanding training and practical experiences (Börjesson, n.d.). These people could have a tendency towards aggressive decision-making in a business context, which is a reflection of their military training.

The way military directors behave in business settings may be explained by the way their financial plans can be adapted from their military worldview. Military training is regimented and disciplined, which gives people a strategic viewpoint that they may use while making financial decisions in the commercial world. This transferability may show up as a predilection for established business procedures and a conservative attitude to risk management (Fletcher & Chatelier, 2000)

Directors of military organizations often bring distinct leadership philosophies that were developed in a hierarchical, goal-oriented setting. This change may have an impact on how they manage corporate teams, which may have an impact on the culture of the company and the way it operates as a whole. Comprehending the subtleties of this shift is essential to appreciating how military experience affects organizational dynamics the financing decision of a firm is influenced by both internal (firm specific) and external (macroeconomic) factors. However, most of the empirical investigations have focus on internal factors whereas the impact of macroeconomic variables on capital structure decisions is somewhat under researched particularly in the context of developing countries. The aim of the study is to analyses the impact of macroeconomic variables on

the capital structure decisions of all listed textile firms in Pakistan for the period 2004-2013. Panel data regression (fixed effects model) was used to estimate the effect of macroeconomic variables on capital structure. The findings of the study reveal that public debt, exchange rates and interest rates are negatively related whereas corporate taxes, stock market development, inflation rate and GDP growth rate are positively related with economic leverage. Moreover, the relationship of corporate taxes, stock market development and exchange rates are significant with the economic leverage. (Rahman, 2016)

Findings of the study

The findings shed light on the intricate relationship between company outcomes and the presence of military directors within the Pakistani context.

The impact of military directors on Return on Assets (ROA) is pronounced, indicating a significant decrease in ROA in the presence of military directors. This suggests that military leadership may have an adverse effect on business success in Pakistan.

Furthermore, there is an observable downward trend in ROA with an increase in the percentage of military directors, highlighting a diminishing return associated with a higher proportion of military personnel on company boards.

Control variables such as board size, firm age, and company size demonstrate expected correlations with firm value. Consistent with prior research, larger boards and older companies positively influence business value. Conversely, leverage exhibits a negative correlation with return on assets, implying potential moral hazard concerns linked to increased debt financing.

Economic factors play a crucial role, with GDP exerting a favorable influence on firm success. Conversely, there is a notable inverse relationship between higher interest rates and erosion of profit margins in Pakistan.

The dataset is predominantly composed of non-military directors, constituting 66.16% of all observations. Nonetheless, military directors hold a significant portion—33.84% of corporate board seats—prompting inquiries into the potential impact of combat experience on governance and decision-making processes.

Comparisons between corporations with and without military directors reveal distinct trends. Companies lacking military directors tend to exhibit higher mean return on assets (ROA), suggesting potential financial advantages for this subset. The increasing inclusion of military expertise on corporate boards is evident, with 67.11% of firms with military directors featuring at least one military director.

Differences in board size (BSIZE), firm age, and business size contribute to the nuanced understanding of the intricate relationship between military leadership and organizational characteristics. Larger board sizes in companies without military directors raise considerations for alternative governance structures.

The average age disparity between businesses with military directors (17.81) and those without (26.18) suggests variations in organizational maturity and development strategies, underscoring the complexity of the connection between business outcomes and military leadership in Pakistan.

These findings imply potential financial benefits for businesses without military directors, and the evolving proportion of military directors signifies broader shifts in governance dynamics. The interplay between business success and military leadership is underscored by economic indicators and organizational attributes within the Pakistani context

CHAPTER 6

CONCLUSION AND RECOMMENDATIONS

6.1. Conclusion

The association between military directors and non-military directors in the organization board the business success is clarified by the research. The results highlight the consequences that drive beyond the boardroom and affect military directors as well as businesses striving for long-term success. In the circumstances of the Pakistani stock market, the results of the random effects regression analysis provide a nuanced view of the complex link between military directors and firm performance. The found adverse effect on Return on Assets (ROA) highlights the need of exercising caution when considering military people for leadership positions in corporations, underscoring the importance of commercial acumen in efficient decision-making processes. A detailed knowledge of the dynamics influencing company performance is facilitated by the thorough investigation of control variables and economic considerations. The aforementioned observations have significance for enhancing corporate governance methodologies and decision-making processes, as they recognize the many elements that impact profitability in the Pakistani stock market.

The distribution of directors, which is mostly made up of civilians, represents the diversity of the people on corporate boards. The significant number of directors with military backgrounds prompts more research about the possible impact of military background on board dynamics, decision-making processes, and corporate governance in general. The foundation for examining how directors' varied experiences add to the intricate world of corporate leadership is laid by this distribution.

The results indicate that the inclusion of military directors on corporate boards may have an impact on financial results, with businesses without military directors perhaps doing better financially. The higher ratio of military directors in firms indicates a growing tendency to incorporate military knowledge into non-military situations. Differences in company age and board size might indicate differences in organizational techniques and structures. Understanding the complex effects of military board membership on company success requires further research and careful evaluation of these variables.

Significant differences are seen in financial performance, board composition, governance frameworks, organizational maturity, and firm size between companies with and without military directors. These disclosures provide important new perspectives on the complex link between military board membership and many aspects of business results. To completely understand the underlying dynamics and ramifications of these disparities, further investigation and study are necessary.

The examination of propensity score matching offers a more sophisticated understanding of the differences between businesses that have and do not have Military Directors. Although there are hints of possible effects on board composition, organizational characteristics, and financial success, more research is required to get a thorough conclusion. Subsequent investigations need to explore the methods by which military leadership impacts certain facets of company governance and performance. Furthermore, taking into account any confounding variables and industry-specific subtleties is essential for a thorough interpretation of these results.

- 1. The appointment of military personnel should prioritize meritocracy, qualifications, competencies, and expertise over political considerations and nepotism. This shift will foster transparency, accountability, and diligence within military firms.
- 2. Prioritizing training programs for military personnel should be a primary criterion for staff development, enhancing overall firm performance. Consequently, equipping military personnel with business acumen will enable effective decision-making, thereby capitalizing on futuristic opportunities, managing risk effectively, achieving extraordinary performance, and fostering sustainable growth.
- 3. Companies must establish clear governance principles and codes of conduct, along with effective and independent monitoring mechanisms. These measures ensure that the performance and sustainability of firms are not compromised by the appointment of militaryconnected board members.
- 4. Providing leadership training for military officers transitioning to corporate roles is imperative. Emphasis should be placed on democratic leadership principles, fostering collaboration, open communication, and respect for diverse perspectives.

5. Recognizing the potential for misunderstandings arising from differing backgrounds, perspectives, and priorities between civilian and military board members, cross-training programs should be implemented. Such programs aim to bridge the gap in understanding each other's roles, responsibilities, and decision-making processes, thereby fostering collaboration and harmony within military firms.

Reference

Abbas, W., & Asghar, I. (n.d.). THE ROLE OF LEADERSHIP IN ORGANIZATIONAL CHANGE.

Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Economics*, *94*(2), 291–309. https://doi.org/10.1016/j.jfineco.2008.10.007

Alibabaee, G., & Khanmohammadi, M. H. (2016). *Economic variables and financial performance of the company*. *10*, 4561–4566.

An, J., Duan, T., Hou, W., & Liu, X. (2020). The legacy of wars around the world: Evidence from military directors. *Journal of International Financial Markets, Institutions and Money*, 64. https://doi.org/10.1016/j.intfin.2019.101172

Ayuso, S., & Argandoña, A. (2007). Responsible Corporate Governance: Towards a Stakeholder Board of Directors? *SSRN Electronic Journal*, 6. https://doi.org/10.2139/ssrn.1349090

Baghdadi, G. A., Safiullah, M., & Heyden, M. L. M. (2023). Do gender diverse boards enhance managerial ability? *Journal of Corporate Finance*, 79, 102364. https://doi.org/10.1016/j.jcorpfin.2023.102364

Bajra, U., & Cadez, S. (2020). Alternative Regulatory Policies, Compliance and Corporate Governance Quality. *Baltic Journal of Management*, *15*, 42–660. https://doi.org/10.1108/BJM-11-2018-0373

Bear, S., Rahman, N., & Post, C. (2010). The Impact of Board Diversity and Gender Composition on Corporate Social Responsibility and Firm Reputation. *Journal of Business Ethics*, 97(2), 207–221. https://ideas.repec.org//a/kap/jbuset/v97y2010i2p207-221.html

Becker-Blease, J. R., Kaen, F. R., Etebari, A., & Baumann, H. (2010). Employees, firm size and profitability in U.S. manufacturing industries. *Investment Management and Financial Innovations*, 7(2).

Benmelech, E., & Frydman, C. (2015). Military CEOs. *Journal of Financial Economics*, 117(1), 43–59. https://doi.org/10.1016/j.jfineco.2014.04.009

Börjesson, M. (n.d.). The psychology of risk and safety in the military: A balancing act.

Bradley, P., & Macintyre, A. (2018). Solving the Military Moral Bystander Problem with Ethics Instruction. In D. Carrick, J. Connelly, & D. Whetham (Eds.), *Making the Military Moral: Contemporary Challenges and Responses in Military Ethics Education*. Routledge/Taylor & Francis Group.

Cook, A., & Glass, C. (2014). Women and Top Leadership Positions: Towards an Institutional Analysis. *Gender, Work & Organization*, 21. https://doi.org/10.1111/gwao.12018

Danso, A., Lartey, T. A., Gyimah, D., & Adu-Ameyaw, E. (2021). Leverage and performance: Do size and crisis matter? *Managerial Finance*, 47(5), 635–655. https://doi.org/10.1108/MF-10-2019-0522

Dewi, V. I., Soei, C. T. L., & Surjoko, F. O. (2019). The Impact of Macroeconomic Factors on Firms Profitability (Evidence From Fast Moving Consumer Good Firms Listed on Indonesian Stock Exchange). *Academy of Accounting and Financial Studies Journal*, *23*(1), 0–327. https://www.abacademies.org/abstract/the-impact-of-macroeconomic-factors-on-firms-profitability-evidence-from-fast-moving-consumer-good-firms-listed-on-indon-7818.html

Do, M. (2013). Does Firm Size Affect The Firm Profitability? Evidence from Turkey. *Research Journal of Finance and Accounting*.

Duffy, T. (2006). *Military Experience & CEOs: Is There a Link?* Korn/Ferry International.

Fahlenbrach, R., Low, A., & Stulz, R. M. (2008). Why Do Firms Appoint CEOs as Outside Directors? *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.1160276

Fernández, M., & Tejerina Gaite, F. (2020). Types of director, board diversity and firm performance. *Corporate Governance: The International Journal of Business in Society, ahead-of-print*. https://doi.org/10.1108/CG-03-2019-0096

Finegold, D., Benson, G., & Hecht, D. (2007). Corporate Boards and Company Performance: Review of Research in Light of Recent Reforms. *Corporate Governance: An International Review*, *15*, 865–878. https://doi.org/10.1111/j.1467-8683.2007.00602.x

Fletcher, J. D., & Chatelier, P. R. (2000). *An Overview of Military Training:* Defense Technical Information Center. https://doi.org/10.21236/ADA408439

Francis, B., Hasan, I., & Wu, Q. (2014). Professors in the boardroom and their impact on corporate governance and firm performance. *Bank of Finland Research Discussion Papers*, Article 15/2014. https://ideas.repec.org//p/zbw/bofrdp/rdp2014_015.html

Fuzi, S. F. S., Halim, S. A. A., & Julizaerma, M. K. (2016). Board Independence and Firm Performance. *Procedia Economics and Finance*, *37*, 460–465. https://doi.org/10.1016/S2212-5671(16)30152-6

Galvin, T. (n.d.). Strategic Leadership Primer for Senior Leaders, 4th ed.

Goldman, E., Rocholl, J., & So, J. (2009). Do Politically Connected Boards Affect Firm Value? *The Review of Financial Studies*, 22(6), 2331–2360. https://www.jstor.org/stable/30225718

Gordini, N., & Rancati, E. (2017). Gender diversity in the Italian boardroom and firm financial performance. *Management Research Review*, 40, 75–94. https://doi.org/10.1108/MRR-02-2016-0039

Hermalin, B., & Weisbach, M. (1998). Endogenously Chosen Boards of Directors and Their Monitoring of the CEO. *American Economic Review*, 88(1), 96–118. https://econpapers.repec.org/article/aeaaecrev/v_3a88_3ay_3a1998_3ai_3a1_3ap_3a96-118.htm

Hillman, A. J., & Dalziel, T. (2003). Boards of Directors and Firm Performance: Integrating Agency and Resource Dependence Perspectives. *The Academy of Management Review*, 28(3), 383–396. https://doi.org/10.2307/30040728

Horowitz, M. C., & Starn, A. C. (2014). How Prior Military Experience Influences the Future Militarized Behavior of Leaders. *International Organization*, 68(3), 527–559. https://www.jstor.org/stable/43282118

Ibhagui, O. W., & Olokoyo, F. O. (2018). Leverage and firm performance: New evidence on the role of firm size. *The North American Journal of Economics and Finance*, 45, 57–82. https://doi.org/10.1016/j.najef.2018.02.002

Iqbal, U., & Usman, M. (2018). Impact of Financial Leverage on Firm Performance. *SEISENSE Journal of Management*, *1*, 70–78. https://doi.org/10.33215/sjom.v1i2.13

Jaroenjitrkam, A., Maneenop, S., & Treepongkaruna, S. (2024). Corporate governance, policies, and outcomes: The appointment of military connected boards and sustainability. *Corporate Social Responsibility and Environmental Management*, *31*(1), 448–471. https://doi.org/10.1002/csr.2579

Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, *3*(4), 305–360. https://doi.org/10.1016/0304-405X(76)90026-X

Jha, A., Panta, H., & Sarkar, S. (2023). Ex-military CEOs and readability of financial reports. *Journal of Business Finance & Accounting*. https://doi.org/10.1111/jbfa.12743

Kim, H.-D., Oh, J. Y. J., & Park, K. (2017). *Men of Honor: Military CEOS and Directors in Korea* (SSRN Scholarly Paper 2970696). https://doi.org/10.2139/ssrn.2970696

Koch-Bayram, I. F., & Wernicke, G. (2018). Drilled to obey? Ex-military CEOs and financial misconduct. *Strategic Management Journal*, *39*(11), 2943–2964. https://doi.org/10.1002/smj.2946

Kumar, P., & Zattoni, A. (2016). Institutional Environment and Corporate Governance. *Corporate Governance: An International Review*, 24, 82–84. https://doi.org/10.1111/corg.12160

Kyereboah-Coleman, A. (2007). The impact of capital structure on the performance of microfinance institutions. *The Journal of Risk Finance*, 8(1), 56–71. https://doi.org/10.1108/15265940710721082

LATIF, A., SAIFI, I., & AJMAL, M. (2023). INSPECTING THE EFFECTS OF NATURAL RESOURCES, ECONOMIC GROWTH AND TRADE OPENNESS ON FIRM PERFOR-MANCE: A CASE OF DANISH ECONOMY. *Bulletin of Business and Economics (BBE)*, *12*, 185–191. https://doi.org/10.61506/01.00017

Li, X., & Jin, Y. (2021a). Do political connections improve corporate performance? Evidence from Chinese listed companies. *Finance Research Letters*, *41*, 101871. https://doi.org/10.1016/j.frl.2020.101871

Li, X., & Jin, Y. (2021b). Do political connections improve corporate performance? Evidence from Chinese listed companies. *Finance Research Letters*, *41*, 101871. https://doi.org/10.1016/j.frl.2020.101871

Li, Z., & Rainville, M. (2021). Do Military Independent Directors Improve Firm Performance? *Finance Research Letters*, 43, 101988. https://doi.org/10.1016/j.frl.2021.101988

Lin, C., Ma, Y., Officer, M. S., & Zou, H. (2011). CEOs' Military Experience, Agency Costs and Acquisition Decisions (SSRN Scholarly Paper 1932623). https://doi.org/10.2139/ssrn.1932623

Liu, X., Hou, W., & Main, B. G. M. (2023). *Military Experience and Subsequent Effectiveness as a Director* (SSRN Scholarly Paper 4439516). https://doi.org/10.2139/ssrn.4439516

Luo, J., Xiang, Y., & Zhu, R. (2017). Military top executives and corporate philanthropy: Evidence from China. *Asia Pacific Journal of Management*, *34*(3), 725–755. https://econpapers.repec.org/article/kapasiapa/v_3a34_3ay_3a2017_3ai_3a3_3ad_3a10.1007_5fs10490-016-9499-3.htm

Madaan, D. A., Mehta, K., & Sharma, R. (2022). A Revisit to Research on Corporate Governance Using Systematic Literature Review. *ECS Transactions*, *107*(1), 4035. https://doi.org/10.1149/10701.4035ecst

Malmendier, U., Tate, G., & Yan, J. (2011). Overconfidence and Early-Life Experiences: The Effect of Managerial Traits on Corporate Financial Policies. *The Journal of Finance*, 66(5), 1687–1733. https://www.jstor.org/stable/41305173

Mohd, A. S., & Siddiqui, D. A. (2020). Effect of Macroeconomic Factors on Firms' ROA: A Comparative Sectorial Analysis from Pakistan (SSRN Scholarly Paper 3681286). https://doi.org/10.2139/ssrn.3681286

Mwenda, B., Ngollo, M., & Mwasota, A. (2023). Effects of Macroeconomic Variables On Performance of Listed Firms at Dar es Salaam Stock Exchange, Tanzania. *Journal of Accounting Finance and Auditing Studies (JAFAS)*, 2. https://doi.org/10.32602/jafas.2023.019

Nakano, M., & Nguyen, P. (2011). Do Older Boards Affect Firm Performance? An Empirical Analysis Based on Japanese Firms. *SSRN Electronic Journal*.

https://doi.org/10.2139/ssrn.1879825

Preuss, S., & Königsgruber, R. (2021). How do corporate political connections influence financial reporting? A synthesis of the literature. *Journal of Accounting and Public Policy*, 40(1), 106802. https://doi.org/10.1016/j.jaccpubpol.2020.106802

Qian, M., Pan, H., & Yeung, B. Y. (2010). *Expropriation of Minority Shareholders in Politically Connected Firms* (SSRN Scholarly Paper 1719335). https://doi.org/10.2139/ssrn.1719335

Rahman, J. M., & Yilun, L. (2021). Firm Size, Firm Age, and Firm Profitability: Evidence from China (SSRN Scholarly Paper 3867566). https://papers.ssrn.com/abstract=3867566

Rehman, Z. ur. (2016). Impact of Macroeconomic Variables on Capital Structure Choice: A Case of Textile Industry of Pakistan. *The Pakistan Development Review*, *55*(3), 227–239. https://ideas.repec.org//a/pid/journl/v55y2016i3p227-239.html

S Fisher, T. (2021). Clarifying the Relationship of Design Thinking to the Military Decision-Making Process. *Muma Business Review*, *5*, 143–146. https://doi.org/10.28945/4830

Salvador, R., Søberg, P. V., Jørgensen, M. S., Schmidt-Kallesøe, L.-L., & Larsen, S. B. (2023). Explaining sustainability performance and maturity in SMEs – Learnings from a 100-participant sustainability innovation project. *Journal of Cleaner Production*, 419, 138248. https://doi.org/10.1016/j.jclepro.2023.138248

Samara, I., & Yousef, I. (2022). The impact of foreign directors and firm performance on strategic change. *Review of International Business and Strategy*, *33*(3), 466–492. https://doi.org/10.1108/RIBS-10-2021-0137

Sarhan, A., & Ntim, C. (2018). Board diversity, corporate governance, corporate performance and executive pay. *International Journal of Finance & Economics*, 24. https://doi.org/10.1002/ijfe.1690

Slomka-Golebiowska, A. (2014). Bankers on boards as corporate governance mechanism: Evidence from Poland. *Journal of Management & Governance*, *18*(4), 1019–1040. https://doi.org/10.1007/s10997-012-9251-4

Song, H. J., Yoon, Y. N., & Kang, K. H. (2020). The relationship between board diversity and firm performance in the lodging industry: The moderating role of internationalization. *International Journal of Hospitality Management*, *86*, 102461. https://doi.org/10.1016/j.ijhm.2020.102461

Suriyapongprapai, M. T. (2019). DOES MILITARILY CONNECTED BOARD AFFECT FIRM PERFORMANCE?

Sürücü, L., & Yesilada, T. (2017). The Impact of Leadership Styles on Organizational Culture. *International Journal of Business and Management Invention*, *6*, 2319–8028.

Tanaka, M., Bloom, N., David, J. M., & Koga, M. (2020). Firm performance and macro forecast accuracy. *Journal of Monetary Economics*, 114, 26–41. https://doi.org/10.1016/j.jmo-neco.2019.02.008

Terjesen, S., Sealy, R., & Singh, V. (2009). Women Directors on Corporate Boards: A Review and Research Agenda. *Corporate Governance: An International Review*, *17*, 320–337. https://doi.org/10.1111/j.1467-8683.2009.00742.x

Tuncay, F. E., & Cengiz, H. (2017). The Relationship between Corporate Profitability and Macroeconomic Indicators: Evidence from 500 Largest Industrial Organizations in Turkey. *International Business Research*, *10*(9), 87–95. https://ideas.repec.org//a/ibn/ibrjnl/v10y2017i9p87-95.html

Walt, N., & Ingley, C. (2003). Board Dynamics and the Influence of Professional Background, Gender and Ethnic Diversity of Directors. *Corporate Governance: An International Review*, 11, 218–234. https://doi.org/10.1111/1467-8683.00320

Wesley, C. L., Martin, G. W., Rice, D. B., & Lubojacky, C. J. (2022). Do the Right Thing: The Imprinting of Deonance at the Upper Echelons. *Journal of Business Ethics*, *180*(1), 187–213. https://ideas.repec.org//a/kap/jbuset/v180y2022i1d10.1007_s10551-021-04903-3.html

White, J., Woidtke, T., Black, H. A., & Schweitzer, R. L. (2014). Appointments of academic directors. *Journal of Corporate Finance*, 28(C), 135–151. https://econpapers.repec.org/article/eeecorfin/v_3a28_3ay_3a2014_3ai_3ac_3ap_3a135-151.htm

Wong, L., Bliese, P., & McGurk, D. (2003). Military leadership: A context specific review. *The Leadership Quarterly*, *14*(6), 657–692. https://doi.org/10.1016/j.leaqua.2003.08.001

Wong, W.-Y., & Hooy, C.-W. (2018). Do types of political connection affect firm performance differently? *Pacific-Basin Finance Journal*, *51*, 297–317. https://doi.org/10.1016/j.pacfin.2018.08.009