TWO ESSAYS ON MILITARY DIRECTORS OF THAI LISTED FIRMS

CHENGLONG ZHENG

A THESIS SUBMITTED IN PARTIAL
FULFILLMENT OF THE REQUIREMENTS FOR
THE DEGREE OF DOCTOR OF PHILOSOPHY(MANAGEMENT)
COLLEGE OF MANAGEMENT
MAHIDOL UNIVERSITY
2023

Thesis
entitled

TWO ESSAYS ON MILITARY DIRECTORS OF THAI LISTED FIRMS

was submitted to the College of Management, Mahidol University
for the degree of Doctor of Philosophy (Management)
on
August 10, 2023

.....
Mr. Chenglong Zheng
Candidate

Pornsit Jiraporn
.....
Prof. Pornsit Jiraporn,
Ph.D.
Chairperson

.....
Prof. Roy Kouwenberg,
Ph.D., CFA
Advisor

.....
Asst. Prof. Simon Zaby,
Ph.D.
Committee member

.....
Assoc. Prof. Chanin Yoopetch,
Ph.D.
Committee member

Vichita Ractham
.....
Assoc. Prof. Vichita Ractham,
Ph.D.
Dean
College of Management
Mahidol University

.....
Assoc. Prof. Pattanaporn Chatjuthamard,
Ph.D.
Committee member

ACKNOWLEDGEMENTS

I would like to express profound gratitude to my advisor, Professor Roy Kouwenberg, Ph.D., CFA, for his invaluable support, encouragement, and supervision throughout my study at the College of Management, Mahidol University. His motivation and constructive suggestions also guide me to be a good researcher. I also would like to thank my thesis committee for their comments.

I sincerely thank the Ph.D. program coordinator, Worawan Prachyapinunt, for all the timely response, assistance, and support regarding data access and information.

Furthermore, I would like to extend my gratitude towards my fellow classmates, who have helped me in many ways through my first year of coursework—especially Chatchai Chatpinyakoop, who is not only a classmate but also shares invaluable experiences about Ph.D.

Finally, I want to thank my family for their financial and emotional support. In particular, I want to thank my wife, Jiranai Chaiyakarn Zheng, for making enormous sacrifices so that I could finish this thesis. Thank her for her patience and commitment to the family, which has allowed me to concentrate on my studies.

Chenglong Zheng

TWO ESSAYS ON MILITARY DIRECTORS OF THAI LISTED FIRMS

CHENGLONG ZHENG 6149614

Ph.D. (MANAGEMENT)

THESIS ADVISORY COMMITTEE: PROF. ROY KOUWENBERG, Ph.D. CFA, PROF. PORNSIT JIRAPORN, Ph.D., ASSOC. PROF. CHANIN YOOPETCH, Ph.D., ASSOC. PROF. PATTANAPORN CHATJUTHAMARD, Ph.D., ASST. PROF. SIMON ZABY, Ph.D.

ABSTRACT

This dissertation studies the appointment of military directors by Thai-listed firms and its various corporate governance implications. There are three significant findings from the study.

First, the military regime is associated with poor firm performance, and businesses with ties to the government generally dislike hiring military directors. They are less inclined to nominate a military director for their board, and those who have been appointed have seen the performance deteriorate. Moreover, when listed firms with government ties appoint military directors, the stock market reacts unfavorably. Nonetheless, military directors still have certain resource provision capacities, as businesses in a consolidated industry are more inclined to choose military directors to protect themselves from possible rivalry.

Second, trustworthy internal governance systems that enhance business performance in Thailand include board independence and block holders, particularly when the focus firm is in a consolidated industry. Last but not least, even though the military director is generally perceived as unqualified to fill the monitoring position on the board, the appointment of the military director has less of an impact on the internal governance of the company because firms typically increase the size of their board to accommodate the military director, allowing them to obtain crucial resources without jeopardizing the effectiveness of the board.

KEY WORDS: Corporate Governance / Military Director / Firm Performance / Earnings Management

195 pages

CONTENTS

		Page
ACKNOWLEDGEMENTS		**ii**
ABSTRACT (ENGLISH)		**iii**
LIST OF TABLES		**ix**
LIST OF FIGURES		**xi**
LIST OF ABBREVIATIONS		**xii**
CHAPTER I	**INTRODUCTION**	**1**
CHAPTER II	**SCIENCE MAPPING THE LITERATURE ON CORPORATE GOVERNANCE AND BOARD ATTRIBUTES: A BIBLIOMETRIC REVIEW OF GLOBAL RESEARCH**	**3**
	2.1 Introduction	3
	2.2 Materials and Methods	6
	2.2.1 Identification of Sources	6
	2.2.2 Data Extraction	8
	2.2.3 Data Analysis	9
	2.3 Results	11
	2.3.1 Volume and Geographic Distribution of Published Studies	11
	2.3.2 Journals	14
	2.3.3 Influential Authors and Articles	19
	2.3.4 Schools of Thought in the BDCG Literature	24
	2.3.5 Topical Focus of the BDCG Knowledge Base	28
	2.4 Limitations	31
	2.5 Conclusions	31

CONTENTS (cont.)

		Page
CHAPTER III	**MILITARY DIRECTORS, PRODUCT MARKET COMPETITION, AND FIRM VALUATION**	**35**
	3.1 Introduction	35
	3.2 Contribution to the Literature	37
	3.3 Theoretical Framework and Hypothesis Development	38
	3.3.1 The motivation for firms to engage in corporate political activities	38
	3.3.2 Military Directors	40
	3.3.3 Military Regimes and Coup d'états in Thailand	42
	3.3.4 Hypothesis Development	46
	3.4 Methodology and Data	51
	3.4.1 Data Collection	51
	3.4.2 Methodology	52
	3.4.3 Measurement of product competition	56
	3.4.4 Measurement of cumulative abnormal returns	58
	3.4.5 Descriptive Statistics	62
	3.5 Empirical results	68
	3.5.1 Explaining Military Directors' Presence on the Board	68
	3.5.2 Abnormal Returns Around Military Director Appointments	77
	3.6 Conclusions and Further Research	82
CHAPTER IV	**POLITICAL CONNECTIONS, INTERNAL CORPORATE GOVERNANCE, AND FIRM PERFORMANCE**	**86**
	4.1 Introduction	86
	4.2 Contribution to the Literature	88

CONTENTS (cont.)

	Page
4.3 Theoretical Framework and Hypothesis Development	89
4.3.1 Internal Governance Effectiveness and Firm Performance	89
4.3.2 The moderating influence of industry competitiveness	93
4.3.3 Political Connections and Firm Governance	93
4.3.4 Audit Committee Effectiveness and Financial Misconduct	95
4.3.5 Political Connections and Financial Misconduct	97
4.3.6 Earning Management Choice	98
4.4 Methodology and Data	100
4.4.1 Data Collection	100
4.4.2 Methodology	101
4.4.3 Measurement of Board Independence	104
4.4.4 Measurement of CEO Duality	105
4.4.5 Measurement of Product Competition	106
4.4.6 Measurement of Real Earnings Management	107
4.4.7 Measurement of Accrual-Based Earnings Management	108
4.4.8 Measurement of Family Firms	110
4.4.9 Sample Distribution and Descriptive Statistics	111
4.5 Empirical Results	115
4.5.1 Corporate Governance and Firm Performance	115
4.5.2 The moderating influence of industry competitiveness	118
4.5.3 Political Connections and Firm Governance	122
4.5.4 Political Connection and Financial Misconduct	128

CONTENTS (cont.)

	Page
4.6 Conclusion	136
CHAPTER V CONCLUSIONS	**139**
REFERENCES	**142**
APPENDICES	**168**
Appendix A: Military Directors' Presence on the Board without Industry Controls	169
Appendix B: Military Directors' Presence on the Board using Military_Percent as Dependent Variable	170
Appendix C: Collinearity Statistics for Study on Military Directors' Presence and Appointment	172
Appendix D: Internal Governance Effectiveness and Firm Performance without Industry Controls	173
Appendix E: Collinearity Statistics for Study on Internal Governance Effectiveness	175
Appendix F: Robust Check for Internal Governance Effectiveness and Firm Performance	176
Appendix G: Internal Governance Effectiveness and Firm Performance with Standardized Coefficient	178
Appendix H: Robust Check for Internal Governance Effectiveness and Firm Performance without Industry Controls	180
Appendix I: Moderating effect of military director appointment without Industry Controls	182
Appendix J: Moderating effect of military directors with standardized coefficients	184

CONTENTS (cont.)

	Page
Appendix K: Robust Check for Military connection and earnings quality	187
Appendix L: Robust Check for Percentage of military directors on board and earnings quality	189
Appendix M: Two-stage least square instrumental variable analysis of military directors on board and earnings quality	191
Appendix N: Robust Check for Military director's audit committee membership and earnings quality	193
BIOGRAPHY	**195**

LIST OF TABLES

Table		Page
2.1	The 20 most active journals publishing BDCG articles ranked by volume of articles, 1996–2018 (n = 6302)	15
2.2	The 20 most influential journals publishing BDCG articles ranked by Scopus citations, 1996–2018 (n = 6302)	16
2.3	The 20 most influential authors publishing BDCG articles ranked by Scopus citations, 1996–2018 (n = 6302)	19
2.4	Scopus citations ranked the 20 most influential BDCG-related journal articles, 1996–2018	21
2.5	The 20 most influential documents based on document co-citation analysis of the BDCG literature	22
3.1	Number of Companies covered in the SET100 index 2006 to 2018	52
3.2	Definition of Variables and expected Sign	55
3.3	Market Competitiveness of Thai listed firms from 2005 to 2018	59
3.4	Descriptive Statistics for the Number and Proportion of Firms with Military Directors	64
3.5	Descriptive Statistics of the Sample	67
3.6	Military Directors' Presence on the Board	70
3.7	Military Directors' Presence on the Board: Propensity Score Matching	72
3.8	Military Directors' Presence on the Board: Regulated versus NonRegulated	75
3.9	Average and cumulative average daily abnormal return for all new military director appointments	77
3.10	Three-day Cumulative abnormal return by type of firms	78
3.11	Cross-Sectional Regression for Cumulative Abnormal Return	81

LIST OF TABLES (cont.)

Table		Page
4.1	Definition of Variables and Expected Sign	111
4.2	Descriptive Statistics of the Sample	113
4.3	Internal Governance Effectiveness and Firm Performance	116
4.4	Internal Governance Effectiveness and Firm Performance	119
4.5	Moderating Role of Military Directors on the Relation between Internal Governance and Firm Performance	123
4.6	The difference in board size between firms with and without military directors	125
4.7	Moderating effect of military director appointment on the relation between government-related firms and performance	126
4.8	Military connection and earnings quality	130
4.9	Percentage of military directors on board and earnings quality	132
4.10	Military director's audit committee membership and earnings quality	135

LIST OF FIGURES

Figure		Page
2.1	PRISMA flow diagram	7
2.2	Article co-citation example	10
2.3	Change in BDCG publication volume over time	12
2.4	Global distribution of BDCG publication	13
2.5	Journal co-citation map	18
2.6	Author co-citation map based on 91000 authors (threshold 20 co-citations, display top 150 authors)	25
2.7	Temporal overlay on a keyword co-occurrence map for the BDCG knowledge base published from 1996-2018	29

LIST OF ABBREVIATIONS

AAR	Average abnormal return
AEM	Accrual-based earnings management
AR	Abnormal return
CA	Current accruals
CAR	Cumulative abnormal return
CAAR	Cumulative average abnormal return
CG	Corporate Governance
DA	Discretionary accruals
NDA	Nondiscretionary accruals
OECD	Organization for Economic Co-operation and Development
REM	Real earnings mangement
SET	The Stock Exchange of Thailand
SETSMART	SET Market Analysis and Reporting Tool
SIC	Standard Industrial Classification
SOE	State-owned enterprise
SOX	The Sarbanes-Oxley Act of 2002
TA	Total accural

CHAPTER I
INTRODUCTION

This Ph.D. dissertation consists of three main chapters focusing on investigating corporate board structure in general and a special type of political director in particular, those with formal military backgrounds in Thailand. The three chapters are:

Chapter II: Science Mapping the Literature on Corporate Governance and Board Attributes: A Bibliometric Review of Global Research

Chapter III: Military Directors, Product Market Competition, and Firm Valuation

Chapter IV: Political Connections, Internal Corporate Governance, and Firm Performance

Chapter II contains a bibliometric review focusing on corporate governance and board attributes. We utilize the Scopus database and Vosviewer software to systematically review all the literature on board attributes and corporate governance, revealing the most prominent articles and authors in the knowledge domain. We also pinpoint the topics of interest in the literature regarding the board attributes and the recently emerging topics in this field. Overall, Chapter II serves as a guideline for thoroughly understanding the knowledge domain on corporate governance and board attributes. The content of this chapter has been published in Zheng and Kouwenberg (2019).

The empirical studies in Chapters III and IV include a literature review, the development of hypotheses, methodology, data, and estimation results. Chapter III examines what kinds of businesses are most likely to appoint military directors and whether or not the stock market reacts to such a choice. Given the military directors' possible resource provision role during the military regime, I hypothesize that the market will respond positively when the focal firm is subject to substantial government regulation or has intense government-related business transactions. Further, I

hypothesize that the market will also respond positively to military director appointments by firms operating in less competitive markets or industries, as these firms may depend on the government indirectly to maintain barriers to new entrants. On the other hand, I expect the relationship to be negative when the firm is under weak government regulations, has few government-related transactions, or operates in a highly competitive market.

Chapter IV studies the impact of appointing military directors on firm-level corporate governance. More specifically, I aim to investigate whether appointing military directors as independent directors leads to weaker monitoring and more deficient firm corporate governance. I hypothesize that the expected positive relation between board independence (a widely documented indicator of firm governance level) and performance is weakened when military directors are appointed as independent directors. And I expect this problem to be more severe when firms depend less on government contracts or regulations or operate in more competitive industries. Furthermore, I hypothesize that appointing military directors as independent directors leads to more severe earnings management problems.

After the detailed analyses in Chapters II, III, and IV, Chapter V provides integrated conclusions and implications of the studies.

CHAPTER II
SCIENCE MAPPING THE LITERATURE ON CORPORATE GOVERNANCE AND BOARD ATTRIBUTES: A BIBLIOMETRIC REVIEW OF GLOBAL RESEARCH[1]

2.1 Introduction

The role of boards of directors is an essential part of the literature on corporate governance. Oversight and monitoring by the board serve as a vital mechanism to control the top executives on behalf of shareholders. Good corporate governance is essential for the sustainable success of corporations (Aras & Crowther, 2008; Elkington, 2006). This is especially the case with respect to large listed firms in the United States and other developed countries where firm ownership and control are usually separated. In cases where the firm is effectively owned and managed by a founding family or a large business group, as is more typical in developing countries, independent directors can monitor the managers/owners on behalf of minority shareholders and other stakeholders (Claessens, Djankov, & Lang, 2000; La Porta, Lopez-de-Silanes, & Shleifer, 1999).

Boards of directors play a crucial role in corporate governance, as they monitor top executives and help to set the firm's overall strategic goals (Johnson, Daily, & Ellstrand, 1996). In principle, scholars recommend that boards should be vigilant monitors of top management on behalf of shareholders and other stakeholders. Nonetheless, in practice, boards have been described as passive prisoners of management (Elson, 1996). Thus, a well-composed and effective board of directors is generally considered a reflection of good corporate governance. In turn, good corporate governance is essential for the firm's sustainability (Aras & Crowther, 2008; Elkington, 2006).

[1] The content of this chapter has been published in Zheng and Kouwenberg (2019).

The emergence of corporate governance as an area of study can be traced to the publication of the Cadbury Report (1992) in the United Kingdom (UK), followed by the Principles of Corporate Governance (1999) by the OECD (OECD refers to the Organization for Economic Co-operation and Development). These documents introduced new guidelines and laws designed to improve the governance of publicly traded firms. The subsequent impetus for the development of 'good governance' came after several large global corporations collapsed due to accounting irregularities and fraud, including HIH Insurance and One-Tel in Australia, for example. Other prominent failures were Enron and WorldCom in the United States (USA), which finally led to the passing of the Sarbanes–Oxley Act in 2002 in the USA to better protect investors against fraud and to strengthen corporate governance. The topic of corporate governance became even more popular after the financial crisis in 2008, in which a lack of good corporate governance in the financial industry came to the broader attention of the public.

The contemporary corporate governance literature cuts across disciplinary boundaries of economics, business, and management. A majority of studies focus on the association between corporate governance and firm attributes, such as firm performance (Bhagat & Bolton, 2008; Core, Holthausen, & Larcker, 1999), voluntary disclosure (Eng & Mak, 2003; Forker, 1992), and earnings management (Cornett, Marcus, & Tehranian, 2008; Xie, Davidson, & DaDalt, 2003). Other lines of related research have studied the connection between corporate governance and stakeholder relations and corporate social responsibilities (Campbell, 2007; Freeman & Evan, 1990; Freeman & Reed, 1983). Moreover, some scholars have also looked into the relationship between corporate governance and top executive compensation (Armstrong, Ittner, & Larcker, 2012; Conyon & He, 2011).

The purpose of this review of research was to examine the theoretical evolution and intellectual structure of the knowledge base on the role of boards of directors in corporate governance (BDCG). We consider practices associated with corporate governance essential to the concept of sustainability since they intersect with companies' economic and ethical-social responsibilities. The review addresses the following research questions:

1. What are the overall volume and distribution by time, geographic source, and publication venues of published BDCG studies?

2. What authors, institutions, and research papers have had the most significant influence on BDCG research?

3. What is the intellectual structure of the BDCG knowledge base?

4. What research topics have attracted attention among scholars in the BDCG knowledge base in the past and present?

In order to address these research questions, the authors analyze 6302 peer-reviewed journal articles drawn from the Scopus index. This review adopts bibliometric methods (Boyack & Klavans, 2010; Gmür, 2003; McCain, 1990) to synthesize the knowledge base on corporate governance and boards of directors. Bibliometric methods incorporate citation analysis, co-citation analysis, and keyword co-occurrence analysis to map out the intellectual structure of a knowledge base. The value of bibliometric methods lies in the ability to document the evolution of literature over time and reveal the intellectual relationship of the existing knowledge base. Thus, this research seeks to illuminate one of the key domains of sustainability in research on corporate governance.

This paper contributes to the literature by providing a bibliometric review of the BDCG literature, which has not been done since Durisin and Puzone in 2009 (Durisin & Puzone, 2009). Unlike a typical literature review, a bibliometric review identifies the most influential articles, journals, authors, and topics in a body of knowledge. The results provide guidance for new researchers in the area about the core articles and authors that have been cited most frequently and how they are linked. Moreover, a keyword co-occurrence analysis highlights the most frequently studied topics in this literature and how the popularity of topics has shifted through the years, which provides a valuable reference for scholars about emerging areas of interest.

2.2 Materials and Methods

Critical synthesis and meta-analysis have been the most widely adopted review methods in corporate governance research (Adams, Hermalin, & Weisbach, 2010; Daily, Dalton, & Cannella Jr, 2003; Dalton, Daily, Ellstrand, & Johnson, 1998; Dalton, Daily, Johnson, & Ellstrand, 1999; Johnson et al., 1996; Shleifer & Vishny, 1997). These methods of systematic review use various techniques to synthesize substantive findings located in identified bodies of related research. In contrast, bibliometric reviews use a range of quantitative methods to analyze the bibliographic metadata associated with published papers in a discipline or line of inquiry. These analyses aim to reveal relevant features that shape knowledge production. Although management scholars have conducted bibliometric reviews in fields such as strategic management (Nerur, Rasheed, & Pandey, 2016; Nerur, Rasheed, & Natarajan, 2008), mergers and acquisitions (Ferreira et al., 2014), knowledge management (Ribière & Walter, 2013), and accounting (Merigó & Yang, 2017), the application of bibliometric analysis in corporate governance research is limited (Durisin & Puzone, 2009). Thus, this bibliometric review of research was designed to complement, not replace or validate, findings from previous reviews of research.

2.2.1 Identification of Sources

Although the Web of Science (WoS) citation database is a popular choice among scholars conducting bibliometric reviews, the Scopus citation database has had broader coverage in social science, especially since 1996 (Vieira & Gomes, 2009). As interest in corporate governance has evolved mainly since the late 1990s, the SCOPUS index, published by Elsevier, was considered the most suitable for this review. This conclusion is supported by other management scholars (Mongeon & Paul-Hus, 2016).

We followed the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines for conducting systematic research reviews of Moher, Liberati, Tetzlaff, and Altman (2010). PRISMA specifies four steps to follow and report when identifying and extracting information for a bibliometric review: see Figure 2.1.

The first step aimed to identify the full set of articles related to the board of directors within the scope of the BDCG literature. An initial search was conducted in

the Scopus database for articles featuring “boards of directors” in the title, abstract or keywords. In addition, articles including both “corporate governance” and either the words “board” or “director” in the title, abstract or keywords, were included in the search. Furthermore, articles including both “governance” and “board structure”, “board characteristic”, or “board composition” were included. Finally, articles mentioning both “board” and “CEO” were included. The search terms had to be set quite broadly because some key articles in this literature, such as “A Theory of Friendly Boards” by Adams and Ferreira (2007), only include the words “board” and “CEO” in the title and abstract, while not explicitly mentioning the terms “boards of directors” or “corporate governance”.

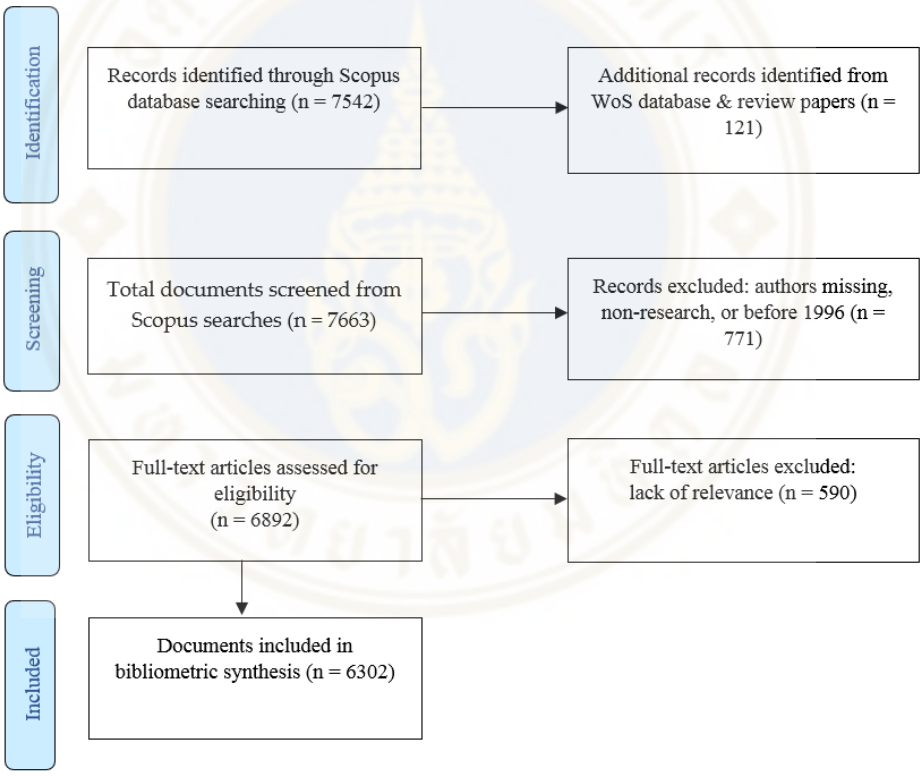

Figure 2.1 PRISMA flow diagram

This figure demonstrates the four steps for identifying, screening, and including articles for the bibliometric review.

The authors conducted the initial literature search on January 19, 2019, yielding a total of 7542 journal articles in the English language. We limited this review

to journal articles for two reasons. First, peer-reviewed journal articles tend to demonstrate a more consistent degree of quality than other types of documents. Second, Scopus provides less comprehensive and systematic coverage of books, book chapters, and conference papers. Since the SCOPUS database contains some errors (misclassifications) and may not cover all relevant research on the topic, the authors cross-checked the reference lists of the top 60 most highly cited review papers in the database and were able to identify 113 additional articles that were not identified in the initial search (these 60 review papers had at least 1 citation in the Scopus database, serving as the cutoff point). In addition, we also performed a search in the Web of Science database using the same search criteria. This led to the identification of eight additional relevant articles.

In the next step, documents without author names were excluded from the database, as well as documents merely a board of directors' report or statement rather than research articles. Moreover, we excluded all documents published before 1996, as Scopus is known to have a weak coverage of pre-1996 publications in economics and the social sciences (Harzing & Alakangas, 2016). Furthermore, we exclude articles from the ongoing year 2019, so the scope of the review is limited to 1996 through 2018. After excluding 771 articles based on these grounds, 6892 articles were left in the database. Then the titles and abstracts of the remaining 6892 articles were scanned manually to ascertain their relevance to this review. This resulted in the elimination of an additional 590 documents, including some duplicates and publications that Scopus had mistakenly included. The process resulted in a final database of 6302 peer-reviewed journal articles on BDCG published since 1996.

2.2.2 Data Extraction

The SCOPUS database of 6302 BDCG-related journal articles was downloaded in a .csv (comma separated value) file format according to the requirements of VOSviewer, the program used for data analysis. The data retrieved includes author names and affiliations, article titles, keywords, abstract, and citation data, including the reference list of all articles. The same information on the 6302 articles was also saved in Excel format and later imported into Tableau software for topographical analysis.

2.2.3 Data Analysis

Data analysis relied on quantitative methods for both topographical analysis and bibliometric analysis. First, the authors employed descriptive statistics in Excel to generate a series of graphs and tables intended to identify patterns within the database, such as the most frequently cited articles and authors (e.g., see Tables 2.1 to 2.4).

Both citation analysis and 'co-citation' analysis were employed to illuminate features of the BDCG knowledge base (Zupic & Čater, 2015). Citation analysis examines the number of times a given document in the review database has been cited by other documents located in Scopus. Thus, citation analysis was used to calculate the number of citations of authors, documents, and journals contained in our review database. Since citations are accepted as a means of establishing scholarly impact, these analyses were used to identify influential authors, articles, and journals within the domain of BDCG scholarship (e.g., see Tables 2.1 to 2.4).

Co-citation analysis (White & McCain, 1998) offers a complementary perspective on scholarly impact by highlighting relationships among authors, documents, or journals within a field of study. Co-citation is defined as the frequency at which two documents are cited together by other documents in the field (Small, 1973). For example, in Figure 2.2, the articles by Jensen and Meckling (1976) and Fama (1980) are considered "co-cited documents" because they are both cited in the reference lists of three documents in the authors' database (Beasley, 1996; Dalton et al., 1999; Hillman & Dalziel, 2003). In co-citation analysis, these two articles are considered 'similar' or 'intellectually related' because they tend to be co-cited together by other studies in the field (Hallinger & Suriyankietkaew, 2018). In Figure 2.2, each of the two co-cited documents receives three co-citations.

It is important to note that the articles authored by Jensen and Meckling (1976) and Fama (1980) are not in our literature database, as they were published prior to 1996. Moreover, Fama (1980)'s article is not even in the Scopus database due to its limited coverage before 1996. Nonetheless, these journal articles featured prominently in our co-citation analysis because they are included in our database's reference lists of many documents. This example highlights the unique ability of co-citation analysis to reach far beyond the original 6302 articles in our database and beyond Scopus, thereby

providing a complementary and arguably more comprehensive approach to traditional citation analysis.

Several different types of co-citation analysis can be conducted: author co-citation analysis (ACA), journal co-citation analysis (JCA), and document co-citation analysis (DCA). ACA shows how frequently two authors have been co-cited and points to the intellectual structure of disciplines and main lines of inquiry (Culnan, 1986, 1987; McCain, 1990). JCA can reveal similarities in topical foci among the journals as well as their relative impact in a field of inquiry (McCain, 1991). For DCA, the underlying assumption is that the most frequently co-cited papers represent the key concepts, methods, and empirical findings in a field (Small, 1973).

Example from the corporate governance and board attributes literature of document co-citation in science mapping.

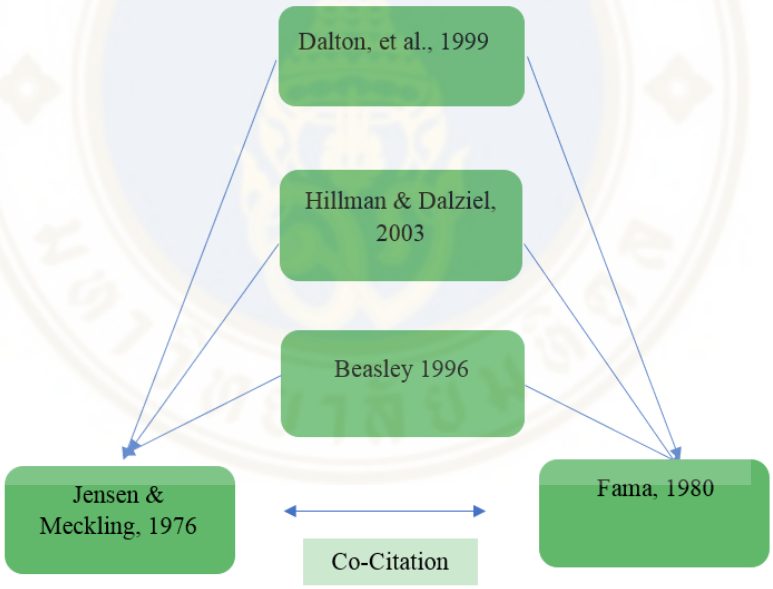

Figure 2.2 Article co-citation example

2.3 Results

The results of the bibliometric analysis are presented in this section, following the pattern of the research questions regarding published BDCG research.

2.3.1 Volume and Geographic Distribution of Published Studies

Our first analysis concerns the volume of the BDCG literature. The 6302 relevant, peer-reviewed journal articles represent a substantial body of knowledge. This conclusion takes on further meaning when we consider that the articles identified in our database only commenced publication in 1996 and do not include the entire corpus of BDCG studies. For example, our database did not include books, book chapters, conference papers, graduate dissertations, or technical reports. If it had, we believe that the total would approach 10,000 documents. We suggest that it is unusual for such a large body of knowledge to accumulate over such a short period.

The evolution of this literature was further analyzed in terms of the longitudinal progression of the annual publication volume of BDCG research (see Figure 2.3). The theoretical foundations of BDCG research were formed in the early 1970s by key works on agency theory (Hallinger & Suriyankietkaew, 2018; Ross, 1973). However, few empirical studies examined agency conflicts between principals and agents in public companies at that time. This was partly due to the fact that no journals were explicitly devoted to corporate governance until 1993, when Blackwell introduced *Corporate Governance: An International Review*. Indeed, the introduction of *Corporate Governance: An International Review* and the Asian financial crisis in 1997 combined to generate some increased interest in this topic during the late 1990s (see Figure 2.3). Data presented in Figure 2.3 further document 2002 as a ‘tipping point’ in the evolution of the BDCG literature.

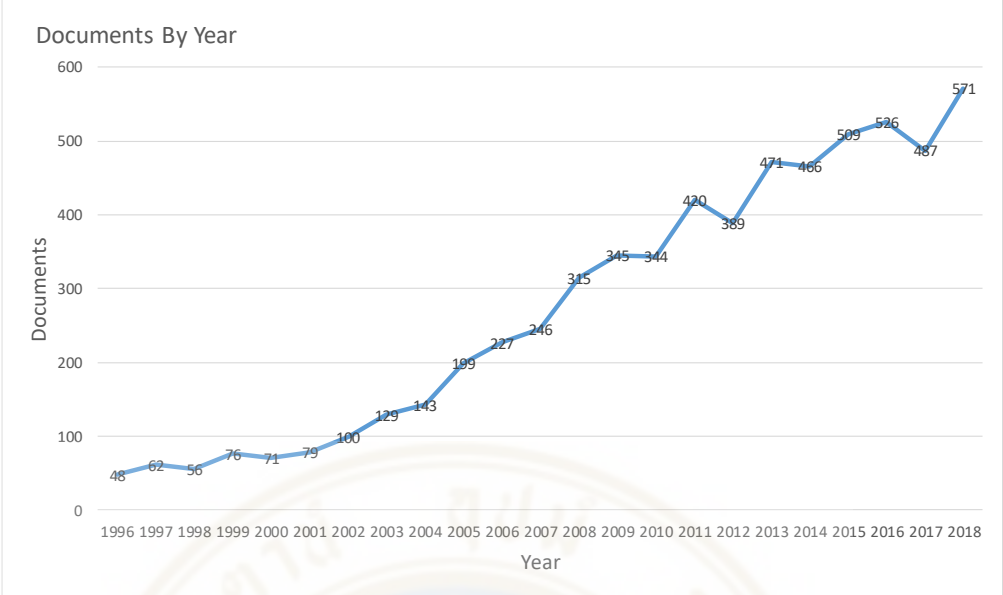

Figure 2.3 Change in BDCG publication volume over time

This figure shows a number of documents published in the board of directors and corporate governance knowledge domain from 1996 to 2018. The total number of articles is 6302.

In 2002, the Sarbanes–Oxley Act (SOX Act) was passed in the USA following several large multinational corporations' collapse due to corporate governance failures, bringing American corporate governance into the global spotlight. Despite the good intentions of its sponsors, the passage of the SOX Act was not without controversy. Scholars identified a range of potential costs and benefits of its adoption, which led to an immediate increase in the number of studies related to corporate governance in the USA. Shortly after the passage of the SOX Act in the USA, similar laws were quickly adopted in other developed countries (Canada, 2002; Germany, 2002; France, 2003; Australia, 2004). Finally, the 2008 international financial crisis generated even more interest in the topic. The continuing failure of corporate governance and lack of oversight by boards in the financial sector was widely considered to be one of the causes of this crisis.

In sum, as shown in Figure 2.3, the evolution of this research literature can be linked to events in international policy and practice. The growth of scholarly interest in this topic started from modest beginnings (i.e., 1996–2001) when the annual publication volume never exceeded 80 Scopus-indexed journal articles. A series of

corporate crises in different countries spurred the passage of legislation and scholarly interest in how boards of directors shape corporate governance practices. This was reflected in steadily accelerating annual publication volume between 2002 when 100 articles were published, and 2018 when 571 articles appeared in print.

Figure 2.4 Global distribution of BDCG publication

This figure demonstrates the global distribution of Scopus-indexed journal articles on boards of directors and corporate governance from 1996 to 2018, with 6302 articles. This statistic is counted based on the author's affiliation countries. Therefore, the total number of publications added together is higher than 6302, as many articles have more than one author.

Figure 2.4 reveals the geographical distribution of this literature (note that VOSviewer bases the count on the national affiliation of the first author). The map suggests this is a truly global knowledge base, covering 105 countries and all continents. At the same time, we note that developed nations dominate the corporate governance literature, with the USA (1994), the UK (780), and Australia (533) leading the field in terms of academic output. While noteworthy, this finding is not surprising. The UK became a pioneer in corporate governance with the issuance of the Cadbury report in 1992. The USA and Australia experienced some of the largest corporate scandals in the early 2000s and were among the first to adopt legislation addressing corporate

governance issues. Aside from those three nations, most of the literature from developed economies comes from Europe, where the OECD has emerged as a strong advocate for good corporate governance practices.

While the volume is significantly lower, the topic of corporate governance and boards of directors has also drawn attention among scholars in emerging markets. This is particularly noticeable in the Asia-Pacific region, where reverberations from the 1997 Asian financial crisis raised the long-term salience of this topic. For example, as indicated in Figure 2.4, Malaysia, China, India, Hong Kong, and Taiwan have each generated more than 100 relevant articles. In sum, despite the dominance of scholarship from Western developed societies in this literature, the global relevance of this topic is affirmed by this analysis of the literature's global distribution.

2.3.2 Journals

The next goal is to illuminate the journal venues of BDCG publications. Data presented in Table 2.1 reveal that the journal publishing the largest number of articles in this field is *Corporate Governance: An International Review* by Wiley-Blackwell. In general, journals focused specifically on corporate governance feature at the top of the list: *Corporate Ownership and Control* (number 2), *Corporate Governance: The International Journal of Business in Society* published by Emerald (number 3). The *Journal of Business Ethics* is ranked fourth due to the close link between ethics, corporate social responsibility, and corporate governance. The *Journal of Corporate Finance*, ranked fifth, is the first journal on the ranking not explicitly focused on governance or business ethics. The remainder of the list also includes some of the top journals in finance and management, such as the *Journal of Financial Economics* (#8) and the *Strategic Management Journal* (#9), illustrating the multi-disciplinary nature of the topic.

Interestingly, in 2017 Scopus stopped coverage of the two journals *Corporate Ownership and Control* (#2) and *Corporate Board: Role, Duties and Composition* (#7), belonging to the publishing house Virtus Inter Press in Ukraine. According to De Jager, De Kock, and Van der Spuy (2017), Virtus Inter Press has been flagged as a potentially predatory or low-quality publisher by Beall's list and the Journal Quality List of the Australian Business Deans Council. Our data reveal an interesting

pattern whereby these two journals published a relatively high number of articles but with the lowest citation count per document (CPD) among the top 20 journals (i.e., average CPD = 1.5). Hence, despite their abundance, articles published in these two journals have had a very low impact on the field. Authors searching for a suitable outlet for BDCG scholarship should be aware of this.

Thus, after excluding the two above-mentioned journals, *Corporate Governance: An International Review*, *Corporate Governance: The International Journal of Business in Society*, the *Journal of Business Ethics*, the *Journal of Corporate Finance*, and the *Journal of Management and Governance* represent the most active journals publishing BDCG scholarship.

Table 2.1 The 20 most active journals publishing BDCG articles ranked by volume of articles, 1996–2018 (n = 6302)

Rank	Journal	Publisher	Coverage	Documents	Scopus Citations	CPD
1	*Corporate Governance: Int. Review*	Wiley-Blackwell	1993–ongoing	424	14,565	34.35
2	*Corporate Ownership & Control*	Virtus Interpress	2003–2016	364	693	1.90
3	*Corporate Governance: Int. J. Bus. Society*	Emerald	2005–ongoing	178	1735	9.75
4	*J. Business Ethics*	Springer	1982–ongoing	142	5790	40.77
5	*J. Corporate Finance*	Elsevier	1994–ongoing	137	7502	54.76
6	*J. Management & Governance*	Springer	1997–ongoing	117	2225	19.02
7	*Corporate Board: Role, Duties & Comp.*	Virtus Interpress	2005–2016	105	129	1.23
8	*J. Financial Economics*	Elsevier	1974–ongoing	99	18789	189.79
9	*Strategic Management. J.*	Wiley-Blackwell	1980–ongoing	92	7395	80.38
10	*J. Banking & Finance*	Elsevier	1977–ongoing	72	4183	58.10
11	*Managerial Auditing J.*	Emerald	1986–ongoing	69	1298	18.81
12	*Int. J. Bus. Governance & Ethics*	Inderscience	2006–ongoing	67	289	4.31
13	*Managerial Finance*	Emerald	2005–ongoing	57	539	9.46
14	*Int. J. of Disclosure & Governance*	Palgrave Macmillan	2009–ongoing	53	222	4.19
15	*J. Business Research*	Elsevier	1973–ongoing	49	1184	24.16
16	*J. Business Finance & Accounting*	Wiley-Blackwell	1974–ongoing	45	1920	42.67
17	*J. Management*	SAGE	1975–ongoing	41	3668	89.46
18	*Pacific Basin Finance J.*	Elsevier	1993–ongoing	41	975	23.78
19	*Academy of Management J.*	AOM	1975–ongoing	40	6702	167.55
20	*Accounting & Finance*	Wiley-Blackwell	1979–ongoing	39	1328	34.05

Table 2.2 shows the journals ranked based on the total number of Scopus citations received. The journal citation count includes only citations to articles within our BDCG database rather than all articles published in those journals. The *Journal of Financial Economics* is, without doubt, the journal where the highest impact papers in this field have been published, based on its total citation count of 18,789. The specialized field journal *Corporate Governance: An International Review* follows with 14,565 total citations. The *Journal of Business Ethics* also appears in the top 10 based on total citations, with 5790 citations. Apart from that, the top 10 most cited journals in Table 2.2 are all leading journals in finance, accounting, management, and strategy, illustrating the multi-disciplinary nature of the BDCG knowledge base.

A comparison between Table 2.1 and Table 2.2 reveals that although journals that focus directly on corporate governance research publish a large share of the articles in this field, they do not necessarily generate the highest citation impact. Instead, a relatively smaller number of articles published in broad-based finance, management, and accounting journals have generated the most significant citation impact based on total citations and CPD (e.g., *Journal of Financial Economics*, *Strategic Management Journal*, *Academy of Management Journal*, *Journal of Finance*, *Journal of Accounting and Economics*, *Administrative Science Quarterly*). This highlights the centrality of BDCG studies to three major business fields: finance, management, and accounting.

Table 2.2 The 20 most influential journals publishing BDCG articles ranked by Scopus citations, 1996–2018 (n = 6302)

Rank	Source	Publisher	Coverage	Documents	Scopus Citations	CPD
1	*J. Financial Economics*	Elsevier	1974–ongoing	99	18,789	189.79
2	*Corporate Governance*	Wiley-Blackwell	1993–ongoing	424	14,565	34.35
3	*J. Corporate Finance*	Elsevier	1994–ongoing	137	7502	54.76
4	*Strategic Management J.*	Wiley-Blackwell	1980–ongoing	92	7395	80.38
5	*Academy of Management J.*	AOM	1975–ongoing	40	6702	167.55
6	*J. Business Ethics*	Springer	1982–ongoing	142	5790	40.77
7	*J. Finance*	Wiley-Blackwell	1946–ongoing	31	5480	176.77
8	*J. Accounting & Economics*	Elsevier	1979–ongoing	29	4691	161.76
9	*Administrative Science Quarterly*	SAGE	1975–ongoing	20	4531	226.55

Table 2.2 The 20 most influential journals publishing BDCG articles ranked by Scopus citations, 1996–2018 (n = 6302) (cont.)

Rank	Source	Publisher	Coverage	Documents	Scopus Citations	CPD
10	*J. Banking & Finance*	Elsevier	1977–ongoing	72	4183	58.10
11	*Accounting Review*	AAA	1996–ongoing	25	3729	149.16
12	*J. Management*	SAGE	1975–ongoing	41	3668	89.46
13	*J. Accounting & Public Policy*	Elsevier	1982–ongoing	34	3468	102.00
14	*Contemporary Accounting Research*	Wiley-Blackwell	1984–ongoing	23	3288	142.96
15	*J. Financial & Quantitative Analysis*	CUP	1966–ongoing	21	3203	152.52
16	*Review of Financial Studies*	OUP	1996–ongoing	29	3018	104.07
17	*Academy of Management Review*	AOM	1978–ongoing	8	2825	353.13
18	*J. Management Studies*	Wiley-Blackwell	1964–ongoing	38	2630	69.21
19	*J. Management & Governance*	Springer	1997–ongoing	117	2225	19.02
20	*Auditing: J. of Practice & Theory*	AAA	1996–ongoing	19	2065	108.68

Figure 2.5 shows a journal co-citation analysis (JCA) map, which complements the results of the journal citation analysis. The size of the bubbles or nodes on the map reflects the relative number of co-citations associated with a given journal. Journals located closely in a JCA map are frequently co-cited (Zupic & Čater, 2015), implying overlap or similarity in article contents. Links offer an additional indication of co-citations between articles published in the related journals. The assignment of color to nodes is based on the frequency of co-citation of articles published in the related journals. Thus, a cluster of journals with a common color can be interpreted as sharing similarities in their published contents.

The JCA generated three distinct and coherent clusters of journals on the network map. As Figure 2.5 shows, the BDCG knowledge base is co-cited in three unique but interconnected groups of journals. The red cluster is related to Management and Strategy, the green cluster consists mainly of Accounting and Auditing journals, and journals in the blue cluster focus primarily on Finance and Economics. Located in the center of the map are *Corporate Governance: An International Review* and the *Journal of Business Ethics*, having links to journals in all of the major disciplines (Management & Strategy, Accounting & Auditing, and Finance & Economics).

The result of the JCA in Figure 2.5 reaffirms findings from the journal citation analysis in Table 2.2 which highlighted the areas of Management & Strategy, Finance & Economics, and Accounting & Auditing, in addition to specialized governance journals. Moreover, the relative size of the three clusters in Figure 2.5 also matches the journal citation analysis. Nine out of the 20 top journals in Table 2.2 judged by total citations are Management & Strategy journals, representing 46% of the total citations, 6 out of the 20 top journals are Finance & Economics journals, representing 38% of the total citations, and 5 out of the 20 top journals are Accounting & Auditing journals, representing 16% of the total citations.

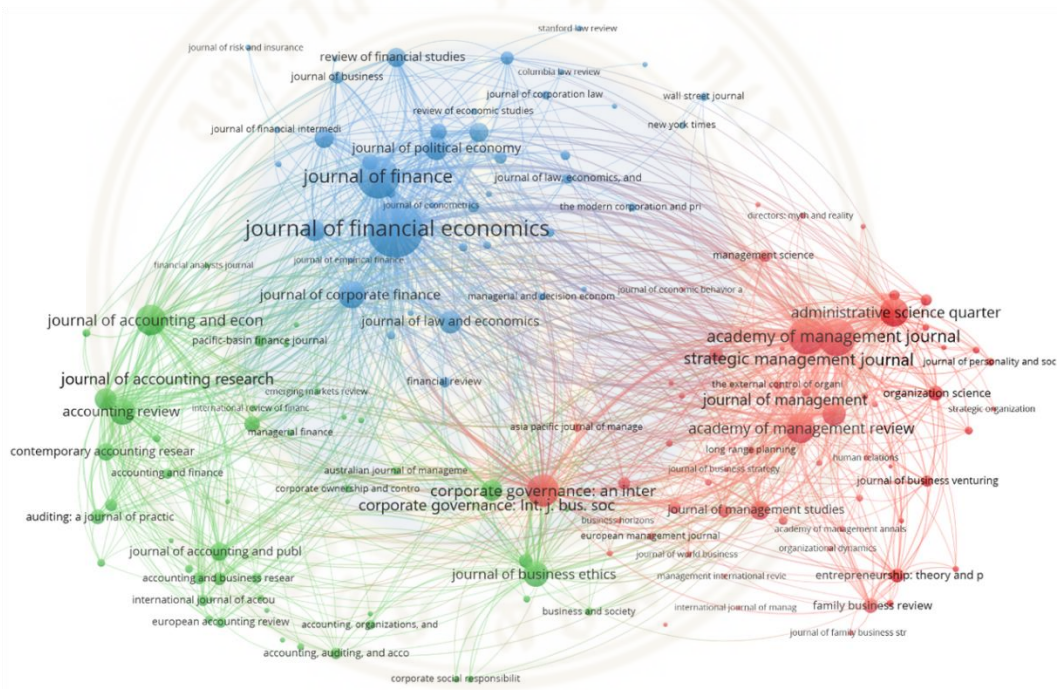

Figure 2.5 Journal co-citation map

This figure shows the network map of the journal co-citations based on 59,862 journals (threshold 20 citations, display top 150 journals). The size of the node indicates the frequency of the journal being co-cited. The color of the node illustrates the intellectual similarity of different journals.

Finally, judging from the co-citation impact, the *Journal of Financial Economics* is the most influential journal in this literature. Furthermore, *Corporate Governance: An International Review* is located in a central location on the map and is

frequently co-cited with journals from all three clusters. From the dual perspectives of co-citation impact (i.e., number of co-citations) and boundary-spanning influence (i.e., links to journals across clusters), the *Journal of Financial Economics* and *Corporate Governance: An International Review* can be classified as the most influential journals in this field of study.

2.3.3 Influential Authors and Articles

Another distinctive feature of bibliometric reviews is the ability to identify scholars and documents that have shaped discourse within a discipline or line of inquiry. Citation analysis is used to determine the most highly cited authors and documents, which reveals intellectual leadership in the field of study. Co-citation analysis, on the other hand, offers more profound insights into the breadth of scholarly impact and the intellectual structure of literature (Gmür, 2003).

Table 2.3 lists the most influential authors ranked by the number of Scopus-indexed citations. Consistent with the earlier reported statistics on geographical distribution, the ranking reveals the intellectual leadership of American scholars. For example, 16 of the top 20 authors are from the United States. The top three authors based on total citations are James Westphal, Catherine Daily (Dalton), and David Yermack. The most influential authors based on citations per document are April Klein, David Yermack, and John Core. In terms of institutional contributions, Indiana University, the University of Arkansas, and New York University stand out in Table 2.3.

Table 2.3 The 20 most influential authors publishing BDCG articles ranked by Scopus citations, 1996–2018 (n = 6302)

Rank	Author	Institution	Nation	Documents	Scopus Citations	CPD
1	Westphal J.	University of Michigan	United States	22	4189	190.41
2	Daily C.	Indiana University	United States	28	3961	141.46
3	Yermack D.	New York University	United States	6	3532	588.67
4	Hillman. A.	Arizona State University	United States	15	3494	232.93
5	Dalton D.	Indiana University	United States	26	3091	118.88

Table 2.3 The 20 most influential authors publishing BDCG articles ranked by Scopus citations, 1996–2018 (n = 6302) (cont.)

Rank	Author	Institution	Nation	Documents	Scopus Citations	CPD
6	Johnson J.	University of Arkansas	United States	8	2800	350.00
7	Ellstrand A	University of Arkansas	United States	8	2733	341.63
8	Larcker D.	Stanford University	United States	8	2623	327.88
9	Huse M.	BI Norwegian Business School	Norway	23	2588	112.52
10	Adams R.	University of Oxford	United Kingdom	8	2542	317.75
11	Klein A.	New York University	United States	4	2434	608.50
12	Beasley M.	NC State University	United States	7	2357	336.71
13	Bebchuk L.	Harvard Law School	United States	10	2312	231.20
14	Zajac E.	Northwestern University	United States	9	2030	225.56
15	Agrawal A.	University of Alabama	United States	6	1928	321.33
16	Ferreira D.	London School of Economics	United Kingdom	6	1903	317.17
17	Shivdasani A.	UNC-Chapel Hill	United States	6	1825	304.17
18	Weisbach M.	Ohio State University	United States	5	1750	350.00
19	Vafeas N.	University of Cyprus	Cyprus	14	1744	124.57
20	Core. J	MIT	United States	4	1683	420.75

We then applied document citation analysis to identify the most prominent documents in the field to further define the most influential authors and articles. Table 2.4 lists the most highly cited documents by the number of Scopus citations.

The result reconfirms the intellectual leadership of David Yermack, John Core, and April Klein (Core et al., 1999; Klein, 2002a; Yermack, 1996). Moreover, Table 2.4 also reconfirms the dominant position of the *Journal of Financial Economics* in this field, as 7 out of 20 top-cited documents were published in this journal. Yermack (1996) was among the first scholars to study the relationship between board composition and the firm's market value. He found that companies with a small board of directors have a higher market value in the United States, suggesting that small boards are more effective. Core et al. (1999) extended the literature by studying the relationship between corporate governance, CEO compensation, and firm performance. Their findings show that CEOs at firms with relatively weak governance earn greater compensation, whereas the performance of these firms is typically poorer, indicative of serious agency problems. Klein (2002a) studies how the board of directors and audit committee attributes

influence reported earnings, finding that earnings management is substantially lower when the audit committee and the board contain more outside directors, suggesting more effective monitoring by independent directors.

Next, to get a broader and deeper insight into the structure of the knowledge base, the authors conducted a document co-citation analysis (DCA). DCA is performed on the much broader literature of 259,685 papers in the document co-citation network based on the reference lists of the 6302 articles in our database. The top 20 co-cited documents are shown in Table 2.5.

Table 2.4 Scopus citations ranked the 20 most influential BDCG-related journal articles, 1996–2018.

Rank	Document	Source	Paper Type	Scopus Citations
1	Yermack, D. (1996). Higher market valuation of companies with a small board of directors	*J. Financial Econ.*	Empirical	2364
2	Core et al. (1999). Corporate governance, chief executive officer compensation, and firm performance	*J. Financial Econ.*	Empirical	1506
3	Klein, A. (2002). Audit committee, board of director characteristics, and earnings management	*J. Account. Econ.*	Empirical	1433
4	Dechow et al. (1996). Causes and consequences of earnings manipulation	*Contemp. Account. Res.*	Empirical	1392
5	Beasley, M. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud	*Account. Rev.*	Empirical	1376
6	Agrawal, A.; Knoeber, C. (1996). Firm performance and mechanisms to control agency problems between managers and shareholders	*J. Financial Quant. Anal.*	Empirical	1097
7	Djankov et al. (2008). The law and economics of self-dealing	*J. Financial Econ.*	Conceptual	1083
8	Dalton et al. (1998). Meta-analytic reviews of board composition, leadership structure, and financial performance	*Strateg. Manag. J.*	Review	1051
9	Hillman, A.; Dalziel, T. (2003). Boards of directors and firm performance	*Acad. Manag. Rev.*	Conceptual	1027
10	Bebchuk et al. (2008). What matters in corporate governance?	*Rev. Financial Stud.*	Empirical	930

Table 2.4 Scopus citations ranked the 20 most influential BDCG-related journal articles, 1996–2018 (cont.)

Rank	Document	Source	Paper Type	Scopus Citations
11	Hermalin, B.; Weisbach, M. (1998). Endogenously chosen boards of directors and their monitoring of the CEO	*Am. Econ. Rev.*	Conceptual	925
12	Adams, R.; Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance	*J. Financial Econ.*	Empirical	858
13	Coles et al. (2008). Boards: Does one size fit all?	*J. Financial Econ.*	Empirical	817
14	Forbes, D.; Milliken, F. (1999). Cognition and corporate governance	*Acad. Manag. Rev.*	Conceptual	814
15	Carter et al. (2003). Corporate governance, board diversity, and firm value	*Financial Rev.*	Empirical	773
16	Xie et al. (2003). Earnings management and corporate governance	*J. Corp. Finance*	Empirical	764
17	Eisenberg et al. (1998). Larger board size and decreasing firm value in small firms	*J. Financial Econ.*	Empirical	763
18	Fan et al. (2007). Politically connected CEOs, corporate governance, and Post-IPO performance of China's newly partially privatized firms	*J. Financial Econ.*	Empirical	748
19	Mizruchi, M. (1996). What do interlocks do?	*Annu. Rev. Sociol.*	Review	723
20	Johnson et al. (1996). Boards of directors: a review and research agenda	*J. Manag.*	Review	687

Table 2.5 The 20 most influential documents based on document co-citation analysis of the BDCG literature

Rank	Co-Cited Reference	Source	Paper Type	Co-Citations
1	Fama, E.; Jensen, M. (1983). Separation of ownership and control	*J. Law. Econ.*	Conceptual	1232
2	Jensen, M.; Meckling, W. (1976). Theory of the firm	*J. Financial Econ.*	Conceptual	1203
3	Yermack, D. (1996). Higher market valuation of companies with a small board of directors	*J. Financial Econ.*	Empirical	844
4	Jensen, M. (1993). The modern industrial revolution, exit, and the failure of internal control systems	*J. Finance*	Conceptual	840
5	Shleifer, A.; Vishny, R. (1997). A survey of corporate governance	*J. Finance*	Review	661
6	Weisbach, M. (1988). Outside directors and CEO turnover	*J. Financial Econ.*	Empirical	535
7	Klein, A. (2002). Audit committee, board of director characteristics, and earnings management	*J. Account. Econ.*	Empirical	397

Table 2.5 The 20 most influential documents based on document co-citation analysis of the BDCG literature (cont.)

Rank	Co-Cited Reference	Source	Paper Type	Co-Citations
8	Fama, E. (1980). Agency problems and the theory of the firm	*J. Political Econ.*	Conceptual	389
9	Morck, et all. (1988). Management ownership and market valuation	*J. Financial Econ.*	Empirical	365
10	Lipton, M.; Lorsch, J. (1992). A modest proposal for improved corporate governance	*Bus. Lawyer*	Conceptual	364
11	Core et al. (1999). Corporate governance, chief executive officer compensation, and firm performance	*J. Financial Econ.*	Empirical	337
12	Beasley, M. (1996). An empirical analysis of the relation between the board of director composition and fin. statement fraud	*Accounting Rev.*	Empirical	336
13	Gompers et al. (2003). Corporate governance and equity prices	*Q. J. Econ.*	Empirical	327
14	Dalton et al. (1998). Meta-analytic reviews of board composition, leadership structure, and financial performance	*Strateg. Manag. J.*	Review	326
15	Eisenberg et al. (1998). Larger board size and decreasing firm value in small firms	*J. Financial Econ.*	Empirical	312
16	Demsetz, H.; Lehn, K. (1985). The structure of corporate ownership	*J. Political Econ.*	Empirical	312
17	Vafeas, N. (1999). Board meeting frequency and firm performance	*J. Financial Econ.*	Empirical	295
18	Hillman, A.; Dalziel, T. (2003). Boards of directors and firm performance	*Acad. Manag. Rev.*	Conceptual	288
19	Eisenhardt, K. (1989). Agency theory: An assessment and review	*Acad. Manag. Rev.*	Review	279
20	La Porta et al. (1999). Corporate ownership around the world	*J. Finance*	Conceptual	266

The data in Table 2.5 indicates that Fama and Jensen (1983b)'s paper "Separation of Ownership and Control" is the most highly co-cited document in the literature. This "canonical paper" (White & McCain, 1998) provided the theoretical foundation of the corporate governance literature, together with Jensen and Meckling (1976)'s paper "Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure" and Fama (1980)'s paper "Agency Problems and The Theory of the Firm." Importantly, these papers were not included in our Scopus-indexed BDCG database. Nonetheless, they were frequently co-cited as key conceptual works on agency

theory and the separation of ownership and control in our database's reference lists of articles.

Apart from theoretical works, several empirical studies are also listed among the most co-cited documents in Table 2.5. More specifically, the co-citation analysis affirms the intellectual leadership of David Yermack, April Klein, and Michael Weisbach in shaping discourse in the BDCG knowledge base. Finally, two other widely co-cited articles deserve mention: "A Survey of Corporate Governance" by Shleifer and Vishny (1997) and "Management Ownership and Market Valuation" by Morck, Shleifer, and Vishny (1988). Finally, the data in Table 2.5 further supports the premier position of the *Journal of Financial Economics* in the corporate governance literature as 7 out of 20 top co-cited documents were published in this venue.

2.3.4 Schools of Thought in the BDCG Literature

Next, we apply the author co-citation analysis (ACA) to reveal the structure of the BDCG knowledge base. ACA groups authors into clusters on a network map based on the similarity of their co-citations (Börner, Chen, & Boyack, 2003; White & McCain, 1998). The ACA map is interpreted using the same guidelines listed for the JCA map. However, the ACA network map also serves as the basis for illuminating different schools of thought or sub-fields within the BDCG knowledge base (McCain, 1990; White & McCain, 1998).

Out of the total 91,000 authors in the author co-citation network (i.e., authors listed in the reference lists of documents in our BDCG database), 4862 authors met the initial threshold of at least 20 author co-citations. Figure 2.6 displays the 150 most frequently co-cited authors in a network map. Figure 2.6 reveals three clusters, or schools of thought, comprising the BDCG knowledge base. These schools of thought are revealed as coherent clusters with dense connections among the three schools. These characteristics of the ACA map suggest that the BDCG knowledge base has evolved into a distinctive field of inquiry, with Michael Jensen, William Meckling, and Eugene Fama clearly located in the center of the map. These three authors have provided the theoretical foundations of corporate governance studies with their contributions to agency theory and the separation of ownership and control in large firms (Fama, 1980; Fama & Jensen, 1983a, 1983b; Jensen, 1993; Jensen & Meckling, 1976).

The green cluster, led by Michael Jensen, David Yermack, Michael Weisbach, and Benjamin Hermalin, focuses on the interconnection between corporate governance, agency problems, and firm performance. These scholars are mostly in the fields of finance and economics. The relatively large size of the nodes shows that scholars in this cluster have had a strong influence on the literature (Hermalin & Weisbach, 1991, 2003; Jensen, 1993). Many of the Finance & Economics school of thought authors examine board composition and its implications for firm valuation and performance (Bhagat & Black, 2001; Hermalin & Weisbach, 1991, 2003; Yermack, 1996). On the top left corner of the green cluster, the authors, led by John Core, David Larcker, and Wayne Guay, have extensively studied the linkage between corporate governance and executive compensation and the incentives that various forms of compensation provided to executives (Core & Guay, 1999; Core, Guay, & Larcker, 2003; Core et al., 1999).

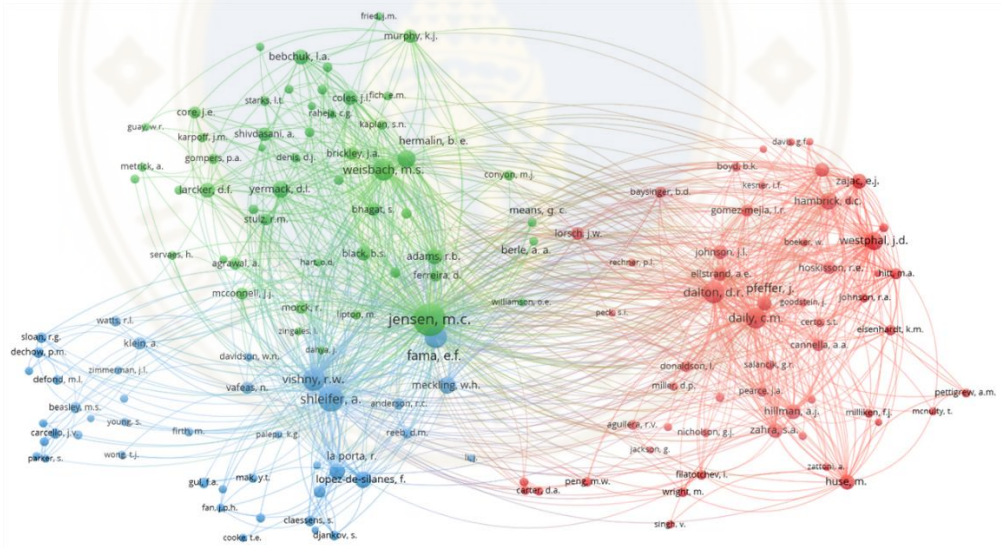

Figure 2.6 Author co-citation map based on 91000 authors (threshold 20 co-citations, display top 150 authors).

Another prominent topic in the green "Finance & Economics" cluster is the process influencing board selection itself (Hermalin & Weisbach, 1998). A widely cited article by Hermalin and Weisbach (1998) provides a formal model of the board selection process, where board characteristics such as independence arise endogenously as the outcome of a bargaining process between the CEO and the board. Two influential

authors close to the center of the graph, Renee Adams and Daniel Ferreira, introduced the theory of "friendly boards" (Adams, Almeida, & Ferreira, 2005, 2009; Adams & Ferreira, 2007). They show how the board's dual role as advisor and monitor of management can give rise to less independent and more management-friendly boards, which improves information sharing between the CEO and the board. Furthermore, Renee Adams and Daniel Ferreira are among the first and most influential authors to investigate the effects of women on board diversity (R. B. Adams & Ferreira, 2009).

Another group of authors located on the top middle corner of the green cluster, led by Jeffrey Coles, have recently published on "co-opted" boards (Coles, Daniel, & Naveen, 2014), where co-option is defined as a director appointed by the currently serving CEO. Their study shows that CEO compensation tends to be higher at firms with more co-opted directors, while the link between CEO pay and performance is weaker, regardless of whether the co-opted directors are independent. This fuels the ongoing debate about whether (and which) "independent directors" are truly independent and how that affects corporate governance (Brickley, Coles, & Terry, 1994; Weisbach, 1988).

The blue cluster is led by Rafael La Porta, Andrei Shleifer, Robert Vishny, and Florencio Lopez-de-Silanes. These four authors co-authored the "Law and Finance" article, a highly cited paper. Authors in this cluster have also contributed key scholarship on ownership concentration and the control of corporations around the world (Claessens et al., 2000; La Porta et al., 1999). On the far left of the blue cluster is a small sub-group of authors, including April Klein, Patricia Dechow, and Mark Beasley. These authors are all in the area of accounting and auditing. Their key works focus on the determinants of earnings management and financial statement fraud, including the role of boards of directors (Beasley, 1996; Dechow, Sloan, & Sweeney, 1996; Klein, 2002a). Overall, the authors in this Law & Accounting school of thought focus on the legal system and shareholder protection (La Porta, Lopez-de-Silane, Shleifer, & Vishny, 1996, 1997) and how these factors shape firm ownership concentration (Claessens et al., 2000; La Porta et al., 1999). Furthermore, authors in the Law & Accounting school study the role of good governance in mitigating earnings manipulation and promoting quality financial statement disclosure (Beasley, 1996; Dechow et al., 1996; Klein, 2002a). We note that the size of the nodes for Andrei Shleifer and Robert Vishny is larger than other scholars

due to the fact that they also co-authored one of the most highly cited review papers on corporate governance, "A Survey of Corporate Governance."

The red cluster consists primarily of authors specializing in Management and Strategy. Dan Dalton, Catherine Daily (Dalton), Jonathan Johnson, and James Westphal are among the most important authors in this cluster. This Management & Strategy school focuses primarily on the interrelation between board composition, strategic leadership, and executive performance (Baysinger, Kosnik, & Turk, 1991; Daily, Johnson, Ellstrand, & Dalton, 1998; Rechner & Dalton, 1991; Westphal, 1999). Among authors in this Management and Strategy school of thought, a prominent subgroup at the top right corner of the red cluster consists of Donald Hambrick, Edward Zajac, and James Westphal. These authors are frequently co-cited due to their focus on the power balance between the board and top executives and upper echelons theory (Finkelstein & Hambrick, 1990; Hambrick & Mason, 1984; Westphal & Zajac, 1995). Westphal and Zajac (1998) have also demonstrated that firms sometimes decouple governance policy from actual practice, trying to placate shareholders with purely symbolic governance actions.

Another prominent group of co-cited authors is located at the bottom of the red cluster, mainly consisting of Shaker Zahra, John Pearce, Amy Hillman, and Morten Huse. These three authors' primary contribution is highlighting the board's service role, which involves representing the firm's interests in the community and linking the firm to its external environment (Huse, 2007; Pearce & Zahra, 1992; Zahra & Pearce, 1989). Related, Amy Hillman has contributed to the resource dependence theory view on the role of boards, which contends that an important function of directors is to provide the firm access to crucial external resources (Hillman, Cannella, & Paetzold, 2000; Hillman & Dalziel, 2003; Pfeffer & Salancik, 2003). For example, firms operating in strictly regulated industries may appoint ex-politicians to their board to manage their relationship with the government (Hillman, 2005), whereas an "outside director" categorization motivated by agency theory (implying better monitoring) would not capture the essential role played by such a director. Finally, authors in this cluster have also studied how governance affects entrepreneurship (Zahra, 1996; Zahra, Neubaum, & Huse, 2000), which also depends on the expertise and resources the board provides (Daily & Dalton, 1992).

2.3.5 Topical Focus of the BDCG Knowledge Base

In order to address the final research question, we employed a keyword co-occurrence analysis to identify frequently studied topics in the BDCG knowledge base, as well as their underlying relationship. The rationale behind a keyword co-occurrence analysis, or co-word analysis, is best explained by Zupic and Čater (2015): "When words frequently co-occur in documents, it means that the concepts behind those words are closely related. The output of the co-word analysis is a network of themes and their relations that represent the conceptual space of a field" (p. 435). Because a keyword co-occurrence analysis reveals which keywords are often jointly mentioned (i.e., combined) by authors, it reveals patterns and trends in the topics studied within a particular knowledge base (Callon, Courtial, & Laville, 1991; Cambrosio, Limoges, Courtial, & Laville, 1993).

The keyword co-occurrence analysis was set to "All Keywords," and a total of 115 keywords were identified. The top five most co-occurring keywords were "corporate governance" (3542 cases), "board characteristics" (2039 cases), "ownership structure" (355 cases), "company performance" (349 cases), and "agency conflicts" (343 cases). These results reveal that studies on BDCG also often consider the closely related issue of ownership structure, whereas agency theory provides the dominant theoretical framework applied in the BDCG knowledge base. Finally, the implications for company performance are the key focus for a large number of BDCG studies.

Another vital contribution of keyword co-occurrence analysis lies in its ability to identify the "emerging research topics" both within the subject area itself and in directly related areas (Bhattacharya & Basu, 1998). The authors used VOSviewer to generate a keyword co-occurrence map for the BDCG literature database, where the threshold for display in the figure was set to at least 30 cases of co-occurring keywords. To get a clearer picture of emerging topics, the authors removed the top two keywords from the map, namely "corporate governance" and "board characteristics," due to their extremely frequent co-occurrence (3542 cases for corporate governance and 2039 cases for board characteristics). The keyword co-occurrence map visualizes two things: (1) frequently occurring keywords based on their prevalence, and (2) how the popularity of keywords changes across specific periods of time (Zupic & Čater, 2015). Figure 2.7

shows the most frequently co-occurring keywords throughout the past decades of BDCG research.

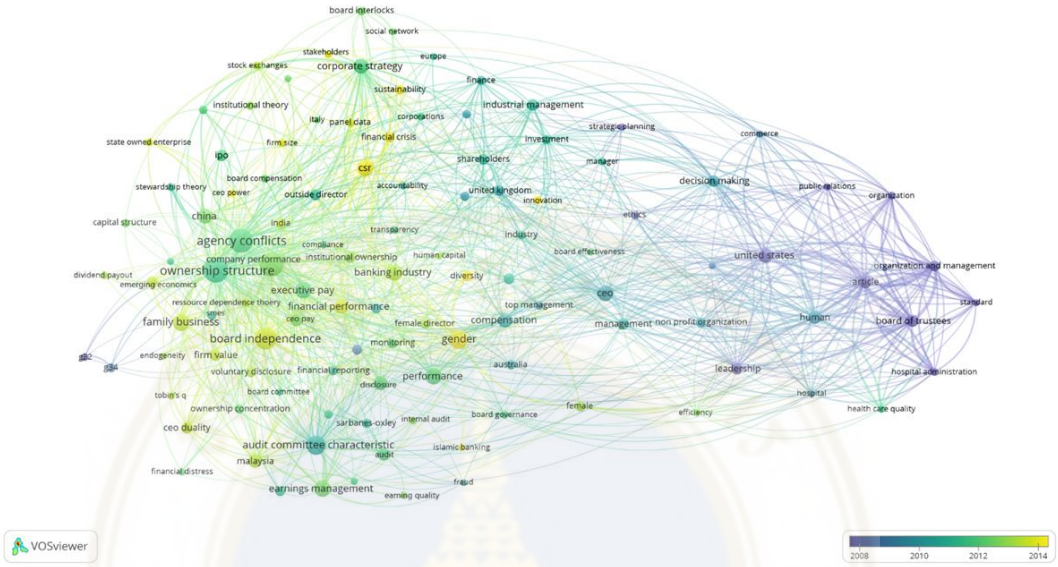

Figure 2.7 Temporal overlay on a keyword co-occurrence map for the BDCG knowledge base published from 1996-2018

This figure demonstrates the most frequently co-occurrent keywords in the board of directors and corporate governance knowledge domain. The threshold is 30 co-occurrences, and the temporal overlay map displays 113 keywords. The size of the dot measures the number of co-occurrences, and the color of the dot indicates the emergence of the keywords.

The emerging research areas in the BDCG knowledge base in the past few years are displayed with light green and yellow colors in Figure 2.7. Ranked by recency and frequency, the research areas that have drawn significant attention in the last few years are gender (205 cases), corporate social responsibility or CSR (160 cases), diversity (71 cases), financial crisis (67 cases), sustainability (50 cases), and innovation (43 cases). This result suggests the current research directions and recent topics of interest among global scholars on BDCG.

Gender diversity at the board level has been studied for some time (Adams & Ferreira, 2009; Campbell & Mínguez-Vera, 2008; Francoeur, Labelle, & Sinclair-

Desgagné, 2008), but the empirical evidence about its effect on firm value is still mixed and inconclusive according to Kim and Starks (2016). Furthermore, women today are still greatly underrepresented on corporate boards, especially compared to their overall workforce participation rate (Kim & Starks, 2016), which has stimulated an academic debate about whether governments should implement boardroom gender policies (Adams, 2016).

An important emerging topic is how boards and corporate governance influence corporate social responsibility (Chan, Watson, & Woodliff, 2014; Jo & Harjoto, 2012) and how CSR affects firm performance (Arora & Dharwadkar, 2011; Jo & Harjoto, 2011). Furthermore, the effects of the new practice of linking executive compensation to CSR performance have recently been analyzed (Hong, Li, & Minor, 2016; Ikram, Li, & Minor, 2019). Moreover, the effect of corporate governance on firm sustainability has received relatively little attention in past studies and is clearly an emerging topic (Aras & Crowther, 2008; Hussain, Rigoni, & Orij, 2018; Kolk, 2008; Michelon & Parbonetti, 2012).

Recent studies have also investigated how corporate governance affects innovation, both empirically (O'Connor & Rafferty, 2012) and using new theoretical models (Sapra, Subramanian, & Subramanian, 2014). Finally, any new empirical study linking corporate governance mechanisms to relevant outcome variables such as innovation, sustainability, or firm performance should be concerned with potential reverse causality effects and endogeneity problems (Li, 2016; Roberts & Whited, 2013). We note that the keyword "endogeneity" appears directly next to "firm value" in Figure 2.7. For example, a widely cited recent study by Wintoki, Linck, and Netter (2012) finds no causal relation between board structure and firm performance when using a dynamic panel generalized method of moments (GMM) estimator to deal with endogeneity problems.

2.4 Limitations

This research review aimed to empirically document the volume, growth trajectory, geographical distribution, and intellectual structure of the BDCG knowledge base. Using data drawn from the Scopus citation database, the authors analyzed 6302 journal articles published between 1996 and 2018. Our analyses included a combination of topographical and bibliometric review methods.

One limitation of the review is that although the Scopus database covers the majority of peer-reviewed journals in economics and social science since 1996, it may omit some relevant research on the topic. This limitation was partially alleviated through our use of co-citation analysis, which extends far beyond the research available in the Scopus database, as demonstrated by our results.

Another limitation is that our bibliometric approach does not analyze the substantive findings of the articles. Keeping this in mind, our review was designed to enable future research that synthesizes the findings from key BDCG studies identified in this bibliometric review.

2.5 Conclusions

This bibliometric review reveals that the BDCG knowledge base grew exponentially from the first year of our search in 1996 into a large body of 6302 journal articles in 2018. Moreover, as indicated by the co-citation analyses, the full literature stretches well beyond the papers analyzed in this review. These findings affirm that concerns for corporate sustainability have driven scholars to embrace research on the role of boards of directors in corporate governance as a legitimate topic of study in the domains of management, economics, finance, and accounting.

Our analysis of the geographical distribution of the BDCG knowledge base found that the majority of articles were authored in Anglo-Saxon countries. In response to various corporate scandals, these were among the first nations to adopt codes of good corporate governance (e.g., the United States, Canada, the United Kingdom, and Australia). At the same time, however, our citation analysis uncovered a global literature of articles authored in 105 countries. Thus, numerous developing and non-Western societies (e.g., Malaysia, China, India, Taiwan, and Hong Kong) have also contributed

significantly to this literature, a trend we expect to continue and strengthen in the coming decade.

The journal citation analysis and document co-citation analysis together clearly demonstrate the multi-disciplinary nature of the BDCG knowledge base. Our database included key journals from disciplines such as finance and economics, accounting and auditing, and management and strategy. Our journal analyses highlighted the most active and influential journals publishing BDCG research. The review identified two influential journals that specifically target corporate governance and business ethics issues, namely *Corporate Governance: An International Review* and the *Journal of Business Ethics*. Notably, these journals occupied central positions in this multi-disciplinary field. However, the most influential articles in the knowledge base were published in top field journals such as the *Journal of Financial Economics*, *Strategic Management Journal*, and the *Journal of Accounting and Economics*. The *Journal of Financial Economics* clearly leads the field in terms of citations and the number of influential articles. These results suggest potential publishing venues for scholars in this research area.

Our findings also demonstrate that the role of boards of directors in corporate governance is a key topic across several different business and management disciplines. A compelling reason is that corporate governance practices can significantly influence many aspects of a business, such as financial performance, earnings management, accounting fraud, executive compensation, strategy, leadership, diversity, and corporate social responsibility. Taken together, these features of corporate governance and practice lay the foundations for firm sustainability.

Another relevant feature of science mapping lies in the ability to identify "canonical documents" that have made significant, long-lasting contributions to the literature. Analysis of their contributions can point toward the origins of the field and unpack its theoretical foundations. Our co-citation analysis revealed the seminal works of Berle and Means (1932), Jensen and Meckling (1976), Fama (1980), and Fama and Jensen (1983a, 1983b) on agency theory and the theory of the modern firm as theoretical foundation stones of the BDCG knowledge base. Original contributions by Andrei Shleifer and Robert Vishny (and their collaborators) on law and finance (La Porta et al., 1996) and ownership concentration (La Porta et al., 1999) have also provided another

foundation stone in the intellectual structure of the BDCG knowledge base. Notably, co-citation analysis identified these older articles through their frequent co-citation on the document reference lists in our review database.

In terms of influential scholars, our analyses highlighted the contributions of David Yermack, April Klein, Catherine Dalton (Daily), Dan Dalton, Michael Weisbach, Jonathan Johnson, Alan Ellstrand, and John Core. Their key works focus on the connection between board composition and firm performance, earnings management, accounting fraud, and CEO compensation, as well as examining the complex relationship between the CEO and the board. In addition, several of these authors have contributed key review articles to the BDCG literature (Adams et al., 2010; Daily et al., 2003; Dalton et al., 1998; Johnson et al., 1996).

Another significant contribution of bibliometric methods lies in the ability to identify distinct sub-fields and themes within a knowledge base. Our journal co-citation analysis revealed that the BDCG knowledge base is composed of several identifiable clusters of journals, each with a distinct focus within the literature. The journal clusters are Finance & Economics, Management & Strategy, and Accounting & Auditing. In addition, the author co-citation analysis revealed three distinctive schools of thought coherently with the three journal clusters, namely the Finance & Economics school of thought, the Management & Strategy school, and the Law & Accounting school of thought. The three distinctive clusters and their influential representative authors provide clear guidance for scholars conducting corporate governance research aiming to explore and connect different areas within this multi-disciplinary field. New scholars in this area will also be easily able to identify the field's theoretical foundations. Previous review articles, such as Adams et al. (2010) and Daily et al. (2003), synthesized the articles within one or two particular sub-fields. In contrast, our bibliometric review was able to show the connections between these fields.

Moreover, the geographical distribution of literature suggests that there is still potential for more research on corporate governance in emerging economies, where the total volume of BDCG research is relatively low, but the growth trajectory is remarkable. Emerging economies are different from developed countries due to their relatively weak legal protection and enforcement (Djankov, La Porta, Lopez-de-Silanes, & Shleifer, 2008; La Porta et al., 1996; La Porta et al., 1997), while concentrated

ownership is prevailing (Claessens et al., 2000; La Porta et al., 1999). Scholars could further test the effectiveness of the Anglo-Saxon and the Continental European styles of corporate governance in these emerging economies.

Our keyword co-occurrence analysis highlights a number of emerging topics in BDCG research that have been gaining interest in the last few years: among the most prominent are diversity, gender, and corporate social responsibility (CSR), as well as the effect of governance on innovation. Finally, we would like to suggest another possible avenue for future research in the field of corporate governance and boards of directors. Although corporate and environmental sustainability is clearly dependent on good governance practices and adequate leadership by the board of directors, there is a dearth of articles on this topic within the knowledge base. Although some past contributions (Aras & Crowther, 2008; Cartwright & Craig, 2006; Elkington, 2006; Enric Ricart, Ángel Rodríguez, & Sánchez, 2005) and recent articles (Klettner, Clarke, & Boersma, 2014; Salvioni, Gennari, & Bosetti, 2016; Shrivastava & Addas, 2014) on the roles of boards of directors in enabling sustainability are available, work on sustainability represent only a tiny fraction of the articles in the knowledge base, leaving ample room for further research on this important topic.

CHAPTER III
MILITARY DIRECTORS, PRODUCT MARKET COMPETITION, AND FIRM VALUATION

3.1 Introduction

Many countries have a long history of military enlistment, and naturally, many people enter the corporate world after they complete their combat training and field duties. Prior studies suggest that executives with a military service background are more likely to obey regulations and laws (Law & Mills, 2017; Rosenbloom, 2011; Zhang, Zhang, & Jia, 2022) and operate within the boundary span of government requirements (Benmelech & Frydman, 2015; Koch-Bayram & Wernicke, 2018; Law & Mills, 2017). Those findings in developed countries indicate that ex-military executives uphold higher ethical standards in business practices, thus benefiting firms from the agency perspective (Fama, 1980; Hillman & Dalziel, 2003; Hillman, Nicholson, & Shropshire, 2008; Jensen & Meckling, 1976).

Although empirical studies suggest a possible linkage between military service and corporate governance, studies attempting to address such linkage are somewhat limited (Koch-Bayram & Wernicke, 2018). Therefore, whether ex-military personnel could enhance the morale of the corporate board and improve the corporate governance level remains underexplored. Part of the reason is that ex-military executives are scarce in the United States (Benmelech & Frydman, 2015), and directors with a military background are even rarer (Simpson & Sariol, 2018).

In the contemporary era, the military in developed countries typically does not significantly impact business operations and government affairs unless it is defense-related. Thus, firms might be reluctant to invite former generals to their boards due to their limitation on providing vital government resources (Hillman & Dalziel, 2003). On the contrary, the armed forces in some developing countries remain a potent influence on business and government (Bunkanwanicha, Fan, & Wiwattanakantang, 2013; Cheema, Munir, & Su, 2016; Fisman, 2001). For example, similar to a business group,

the Thai military also owns stakes in financial and media companies and provides non-security services (Naknoi, 2020; Pathmanand & Connors, 2019). The difference between developed and developing countries is that direct political involvement by the military is a common phenomenon in emerging economies with weak institutional settings (Civilize, Wongchoti, & Young, 2015).

In those countries, businesses and entrepreneurs are more inclined to intensify their relationship with the military elite through director appointments, benefits tunneling, or marriage (Bunkanwanicha et al., 2013; Peng, Au, & Wang, 2001). The direct political involvement by armed forces in several emerging markets highlights the military's political role. Thus, the military elite can be seen as one of the essential government resource providers in those countries (Pfeffer & Salancik, 1978). From the resource dependence theory (RDT) perspective, firms might benefit from appointing prominent generals to their board when the military has some say on critical government-related issues, such as procurement and regulations (Blau, Brough, & Thomas, 2013; Goldman, Rocholl, & So, 2013; Suriyapongprapai, Chatjuthamard, Leemakdej, & Treepongkaruna, 2022).

However, in a contradictory vein, appointing an incumbent or former general to the corporate board might hamper the monitoring function of the board from the agency theory perspective due to the inherent business (or financial) knowledge and experience required for the director's role (Jensen & Meckling, 1976). Lengthy military service also means that after devoting most of their career time to the armed forces, military directors might lack relevant expertise due to their limited business education and experience (An et al., 2020; Chen et al., 2021). The mismatch of knowledge and expertise might erode the resource provision benefits of military directors, as the presence of military directors could be detrimental from a corporate governance standpoint.

We are thus motivated to understand what type of firms would like to appoint military directors and whether or not the market reacts favorably to such an appointment. More importantly, we test if the market reaction is different for different types of firms, depending on their reliance on the government and the level of market competition. The unarresting political turmoil in Thailand since former prime minister Thaksin Shinawatra's exile in 2006 provides an excellent testing ground for this study.

The Royal Thai Army played a significant role during the political turmoil. It struck two coup d'états (2006 and 2014), and two generals (General Surayud Chulanont from 2006 to 2008 and General Prayut Chan-o-cha from 2014 to 2023) have served as the country's leader since then. In addition, many ex-military personnel joined the board of Thai-listed firms after these military coups.

3.2 Contribution to the Literature

This research yields two main contributions to the literature. The first contribution is to understand better why firms appoint military directors and whether it is beneficial, focusing on a developing country where the military plays a vital role in politics and the government. Previous studies often concentrate on ex-military executives (Benmelech & Frydman, 2015) and how their military training impacts their management styles (Koch-Bayram & Wernicke, 2018; Law & Mills, 2017). There are minimal studies on military directors (Chen et al., 2021; Kim, Oh, & Park, 2017) as (ex-)military personnel in developed countries typically do not assume direct political roles outside the scope of national defense. On the contrary, direct political involvement by the military is more evident in emerging markets, such as Indonesia, Pakistan, Bangladesh, and Thailand (Civilize et al., 2015; Nawaz, Haniffa, & Hudaib, 2023). Therefore, military directors in those markets might take on essential resource provision roles (Hillman & Dalziel, 2003). Our results give insights into corporations' motivation to incorporate military directors into their boards. Firms with government-related business transactions are less likely to appoint military director when the civilian government is in charge, and firms are also inclined to utilize them to protect their dominant market position and defend against potential competition.

Second, this research contributes to the literature by providing a fresh perspective to test the impact of military directors' appointments through the lens of market reaction. Previous studies suggest that ex-military executives in the United States uphold strong ethical values and business morale and help strengthen compliance with regulatory requirements (Koch-Bayram & Wernicke, 2018; Law & Mills, 2017). However, it is unclear whether ex-military directors in emerging markets uphold the same values, even though many countries also adopt military training and curricula

similar to the United States (Sirivunnabood & Ricks, 2016). After all, the institutional environment in emerging economies is remarkably different compared with the United States (Faccio, 2010). Then, it is an open question whether appointing prominent military figures is welcomed by the financial market from an agency theory perspective, as military directors tend to be less qualified for the designated monitoring role (Chen & Komal, 2018; Kang & Zhang, 2018). We documented evidence that even though firms are more inclined to appoint military directors on the board when their operating environment is less competitive, such an action is not well-perceived by the capital market.

3.3 Theoretical Framework and Hypothesis Development

The scholarly literature has dedicated significant attention to the examination of political directors and corporate political activity (CPA) through the lenses of both agency theory and resource dependence theory (Hillman, Keim, & Schuler, 2004; Lawton, McGuire, & Rajwani, 2013; Lux, Crook, & Woehr, 2011).

3.3.1 The motivation for firms to engage in corporate political activities

RDT suggests that firms may engage in CPA when they operate within the narrow boundaries set by the legislators (Lawton et al., 2013; Lux et al., 2011). Such a restrictive operating environment motivates firms to participate in CPA to alleviate the constraints (Agrawal & Knoeber, 2001; Claessens, Feijen, & Laeven, 2008; Hart, 2001; Richter, Samphantharak, & Timmons, 2009). For example, the financial industry in the United States is heavily regulated by the government. Not surprisingly, the financial sector's political action committees (PACs) rank as one of the most significant contributors to legislators (Kroszner & Stratmann, 1998).

Moreover, firms, especially those in regulated industries, often have more direct government-related business transactions. The proportion of government sales in firms' revenue also explains why some firms engage in CPA more actively (Goldman et al., 2013; Witko, 2011). From the RDT perspective, a higher portion of government sales directly translates into a higher dependence on the government (Pfeffer & Salancik, 1978). Firms benefiting from sizable business transactions with the

government thus have a strong incentive to manage their reliance on the government for more favorable terms or additional government contracts (Hansen & Mitchell, 2000; Hart, 2001; Ryan, 2020). Evidence suggests that government sales positively determine the likelihood of PAC formation (Hart, 2001; Hersch & McDougall, 2000), whether or not to set up an office in the capital city (Hart, 2001), and the number of lobbyists employed (Hansen & Mitchell, 2000).

For example, defense contractors, given the importance of government sales to their profitability or even survivorship, tend to contribute heavily to political campaigns. Notably, their contribution is primarily driven by a pragmatic approach (Burris, 2001; Harrigan, 2017), which means they not only endorse politicians or parties with coherent ideology but invest in both the incumbent and challengers regardless of their political preference.

Unlike the RDT perspective, the benefits of political connections are less conclusive from the agency theory perspective. For example, by investigating 14 years of corporate donation data in the United States, Aggarwal, Meschke, and Wang (2012) find that corporate donation is associated with unsatisfactory future excess returns. They suggest that such a negative relationship partially results from poor corporate governance originating from political connections. More importantly, this type of incident is not limited to the U.S. alone. Chen, Li, Luo, and Zhang (2017) also outline those political connections, besides their apparent value effect (helping hand), equally have a negative cost effect (grabbing hand) on firm performance in China. They suggest that firms benefit from the initial political connections, but when the political connections become too extensive, the firm's value drops accordingly. They attribute this U-shaped relationship to rent-seeking activities by politicians.

Further, reported earnings quality is usually lower for politically connected firms (Chaney, Faccio, & Parsley, 2011; Fan & Wong, 2002). For example, by analyzing 4500 companies across 19 countries, Chaney et al. (2011) document an inverse relationship between political connections and the quality of financial statements. They conjecture two reasons for this phenomenon observed globally in their multi-country study. First, firms might report poor-quality information purposefully to allow controlling owners to appropriate benefits from minority shareholders (Fan & Wong, 2002). Second, politically connected firms might face less negative impact from poor-

quality earnings. Thus, they are unwilling to spend the effort to correct inaccurate reports. Chaney et al. (2002) only provide evidence to support the second hypothesis as politically connected firms are associated with a lower cost of debt, which theoretically should be high when firms disclose financial data with inferior quality (Francis, LaFond, Olsson, & Schipper, 2005).

3.3.2 Military Directors

Besides campaign contributions or registered lobbying, firms can cultivate political connections by nominating prominent political figures or individuals with affluent political links to the corporate board (Lawton et al., 2013; Suriyapongprapai et al., 2022). Hillman (2005) defines a political director as a director with prior political experience (elected and appointed) at different government levels. Later scholars also widely adopted this definition (Goldman, Rocholl, & So, 2009; Kim & Zhang, 2016; Pascual-Fuster & Crespí-Cladera, 2018). Empirical evidence often suggests that the capital market reacts positively to the nomination of such political directors (Goldman et al., 2009), and firms with political directors on the board receive a higher market valuation (Houston & Ferris, 2015; Suriyapongprapai et al., 2022). Apart from the valuation benefits, firms can also benefit from their political directors for business activities such as government contracts (Goldman et al., 2013), bank loans (Houston, Jiang, Lin, & Ma, 2014; Khwaja & Mian, 2005), and international expansion (Yarbrough Jr, Abebe, & Dadanlar, 2017).

Given those apparent resource provision benefits, political directors' presence on corporate boards has grown steadily and drawn significant attention among scholars (Lester, Hillman, Zardkoohi, & Cannella Jr, 2008). However, directors with military backgrounds are seldom seen in developed markets. Thus, directly related research on the impact of military directors is limited (Simpson & Sariol, 2018). The limited role played by military directors in developed countries is largely attributed to military personnel often lacking the depth and breadth of human and social capital (Lester et al., 2008). So, their role as resource providers outside the scope of national defense is questionable.

However, direct political involvement by the military is more prevalent in developing markets. For example, Bangladesh has experienced more than ten military

coups since its independence in 1971. In Pakistan, the military, civilian politicians, and religious forces have either federally or individually vied for political domination over the past decades (Nasr, 2004; Nawaz et al., 2023). Also, in Thailand, the military, monarchy, and bureaucracy are the three pillars that have shaped Thailand's governmental structure for a long time until today (Baker, 2016). Therefore, the military plays a more prominent political role in those countries. Naturally, firms in those countries are more likely to establish a strong link with the military through director appointments.

The Royal Thai Army, has evolved over decades into an important political class and prominent political player in Thailand, similar to other emerging countries. Since the 20th century, there have been two high publicity coups in Thailand and those two coups both resulted in some form of military affiliated government. The distinction between political director and military director thus become blurred more than before. For instance, of the 250 senators in the Thai Senate, at least 87 are active members of the armed forces. This is without even accounting for the possible indirect military ties that may arise from marriage and family.

Despite the prevalence of military influence in several developing markets, the literature on military directors and their impact is still scarce at the firm level. The few available studies frequently yield conflicting results from a corporate governance standpoint. For example, Harymawan (2018) finds that Indonesian firms can acquire cheaper bank loans with military directors on their boards. Harymawan (2020) also indicates that Indonesian firms are less likely to appoint prestigious external auditors (the Big 4) when they have military directors. A more recent study by Treepongkaruna, Chatjuthamard, and Leemakdej (2023) using data from Thailand revealed that firms with military-connected boards have lower stock price crash risk and attributed the decreased risk to the fact that individuals who served in the military tend to engage in more conservative business practices. Nawaz et al. (2023) also suggest that a military director's presence is often associated with lower CEO compensation and higher dividend payout. Those two recent studies indicate that military directors can be more

prominent in limiting the agent's rent-seeking activities, thus enhancing firm-level corporate governance.

Other available studies often treat military directors as part of the group of political directors rather than singling them out separately (Bunkanwanicha & Wiwattanakantang, 2008; Sitthipongpanich & Polsiri, 2015). However, military and traditional political directors (defined by Hillman (2005)) differ in many aspects. First, you often need to have a strong track record to become a politician, such as a solid educational background, a convincing vita, or an eminent family line. Second, it usually requires a long path to rise to power, which means aspiring politicians must work in various government and political party roles and departments. This suggests that former politicians are more knowledgeable and insightful regarding government policy, legislation, and industry developments. However, retired generals, though frequently participating in civil government in defense-related positions, tend to have less direct connections and experience within the government and political parties. Their lack of business education and industry experience may also hamper their ability to perform the board member roles of advice, counseling, and monitoring.

3.3.3 Military Regimes and Coup d'états in Thailand

This study is conducted in Thailand, which has gone through many military regimes and coup d'états in its history; the two most recent coups occurred in 2006 and 2014. In this section, we will briefly describe the background and context of military regimes in Thailand, which has led to an increase in military director appointments on firm boards in the last decade.

Military regimes are a widely observed and well-studied type of government across multiple continents, particularly in Asia[2] (Alagappa, 2001). Military interference is commonly triggered by economic hardship, political conflict, or misconduct by politicians (Cheema et al., 2016; Civilize et al., 2015; Fisman, 2001). Coup d'état is frequently used to expel infamous politicians and restore order undemocratically (Ockey, 1994) or to help military elites seize power for personal gain (Pathmanand, 2008). Coup

[2] There are number of Asian countries where military elite has vast influence over the course of political change, some of those countries are Indonesia, Pakistan, Burma, South Korea, Vietnam, Thailand, India, Myanmar, Laos PDR, and Bangladesh (Civilize et al., 2015; Huang, 2013; Lovell, 1967; Sayalath & Creak, 2017)

d'états often start with a conflict between the incumbent administration and the armed forces and typically end with a military takeover and overthrow of the government. The 2006 Thai coup d'état is one such example (Pathmanand, 2008).

Regardless of the root cause for coup d'états, the public and the media who embrace democracy and human rights typically criticize the coup. The reasons are two-fold; first, overthrowing a democratically elected government through military intervention is illegal and unconstitutional (Civilize et al., 2015; Pathmanand, 2008). Second, military rule often represents a retrogression of the political system, such as suppression of democracy, the imposition of martial law, and restrictions on the free press. Moreover, military regimes typically do not tolerate oversight by the parliament, independent organizations, and the press, which can lead to more unchecked corruption and cronyism.

Thus, military rule is often perceived negatively and widely considered as one type of political risk that demands corporate attention. For example, Le and Zak (2006) document that political instability significantly impacts capital flight in developing countries, and coup d'états represent a considerable portion when measuring political instability. Moreover, tourists often perceive military rule as risky and are more reluctant to travel to countries with military interventions (Gozgor, Demir, & Bilgin, 2017).

In Thailand specifically, the 2014 coup d'état was Thailand's 19th of the kind since 1932 (Bunkanwanicha & Wiwattanakantang, 2008). Thailand experienced only three coup d'états after 1970, namely in 1991, 2006, and 2014. Similar to the previous ones, the 2014 coup d'état overthrew a democratically elected government, but unlike the previous coups, the one in 2014 was followed by a lengthy military regime. As of the time of writing (March 2023), Thailand's prime minister is an ex-general who led the 2014 coup and continued as the country's leader after an election in 2019. The 2014 coup d'état was an aftermath of the 2006 military coup, which sent Mr. Thaksin Shinawatra (the former prime minister of Thailand from 2001-2006) into exile. The two coups are similar because they aimed to remove the Thaksin family's strong political

influence in Thailand and were led by the same group within the armed forces (Baker, 2016).

Thaksin Shinawatra, a self-made billionaire turn politician, founded the Thai Rak Thai party in 1998 and ran for prime minister in 2001. He and his party gained unprecedented support from the rural areas as his campaign promises, such as a farmer debt moratorium and a universal health care program, targeted precisely to people with low incomes (Hewison, 2010). He delivered most of his campaign promises shortly after being elected, and those populist policies helped him secure a second election victory in 2005 (Phatharathananunth, 2008). Exceptional political success in the election also gave the Thai Rak Thai Party the absolute majority in the parliament (winning 377 out of 500 seats) after the 2005 election. This massive election victory, combined with Thaksin's concentration of power in the hands of his family and party, angered the traditional political forces and eventually led to the military overthrow of the Thaksin administration in 2006 (Chambers & Waitoolkiat, 2016; McCargo, 2005; Pongsudhirak, 2008). The three pillars of the old establishment – monarchy, military, and bureaucracy – after the 2006 coup strongly opposed any potential proposals to bring the ousted Thaksin Shinawatra back (Baker, 2016).

After Mr. Thaksin's exile in 2006, the political field in Thailand became highly volatile, with rising domestic tensions between different interest groups and four different prime ministers serving in the five years before the 2011 general election. During the 2011 election race, the Pheu Thai Party (a pro-Thaksin political party) nominated Yingluck Shinawatra, the younger sister of Thaksin, to run for prime minister. Yingluck Shinawatra used similar campaign strategies as her brother and won a landslide victory as expected. With the fear that Yingluck might bring her brother back out of exile to Thailand, anti-government protests took place between November 2013 and May 2014. One reason is that political parties affiliated with Mr. Thaksin have won the majority in every election since 2006 due to his massive grassroots support in rural areas, which restricted the influence of the middle class and the traditional elites in Bangkok, including the military and high-ranked civil servants (Baker, 2016; Chambers & Waitoolkiat, 2016).

On May 22, 2014, General Prayut Chan-o-cha, Commander of the Royal Thai Army (RTA) at the time, launched a coup d'état to resolve the street turmoil in

Bangkok. After the military disbanded the caretaker government, General Prayut established the National Council for Peace and Order (NCPO) to govern the nation temporarily. As the leader of NCPO, General Prayut essentially became the leading cadre with both administration and legislation power on hand. With such unified authority and the RTA backing, General Prayut ran the country militarily, and no dissent was allowed.

Exactly two months later, the NCPO partially repealed the 2007 constitution and issued an interim constitution. This interim constitution grants General Prayut the right to establish a unicameral legislature, the National Legislative Assembly of Thailand (NLA). However, the legislators primarily consist of General Prayut's close associates and family. The NLA later non-democratically elected General Prayut to be the new prime minister of Thailand. General Prayut retired from the army chief position in October 2014 but still held the NCPO leader post.

A new constitution was drafted under General Prayut and approved on August 7, 2016. Under this new constitution, parliament comprises a Senate (250 seats) and a House of Representatives (500 seats). For the Senate, the NCPO will be responsible for selecting the committee that will be tasked with choosing the senators. For the House, three hundred fifty members of the House of Representatives are elected on a constituency basis, and the remaining 150 are elected on a party-list basis. More importantly, the parliament could only select candidates as Prime Minister as long as the appointed Senate approves, even if such a person is not affiliated with any party. This new constitution essentially paved the way for General Prayut to win the general election in 2019, the first election since the 2014 military coup, and resume the post of prime minister (Ricks, 2019). The election victory ensured that Thailand continued to be led by a former general until 2023. Since Thaksin's exile, the lengthy military rule and turmoil in the domestic political environment revealed a new chapter for Thai publicly listed firms. Thai firms started to appoint generals to their boards as those prominent military figures played an essential political role during this era (Chambers & Waitoolkiat, 2016).

Therefore, military directors in Thailand also share some similarities with traditional political directors. First of all, ever since the end of absolute monarchy in the 1930s, the armed forces have exercised solid political influence in Thailand, branching

their influencers in many areas of Thai societies, including business communities and political parties (Morell, 2020). Second, the military government established by the junta has promoted several prominent military figures into the Thai government's administrative and legislative branches. For example, the 250 members of the Thai Senate have at least 87 top military personnel directly serving as the Senators themselves, not counting the potential hidden military connection through family and marriage.

3.3.4 Hypothesis Development

Prior studies often suggest that firms engage in CPA to sustain economic interests (Goldman et al., 2013; Khwaja & Mian, 2005; Witko, 2011). Thus, we could portray firms' efforts to engage the CPA as a positive net present value (NPV) investment, so much so that it enhances firm value (Cooper, Gulen, & Ovtchinnikov, 2010). From the RDT perspective, electing a prominent politician to the board provides a strong signal to the capital market about the firm's ability to acquire essential government resources (Ferguson & Voth, 2008). And such a nomination is often associated with favorable market reactions in the United States (Goldman et al., 2009; Luechinger & Moser, 2014)

Such a relationship is also notable in emerging markets. For example, Claessens et al. (2008) investigated corporate contributions during two Brazil general elections (1998 and 2002) and found that companies that donate to elected politicians experience higher stock returns than their peers. Bunkanwanicha et al. (2013) analyzed marriage announcements in Thai newspapers and found that the stock price increases significantly when family firms connect with prominent politicians through the marriage of family members. In contrast, other types of marriage (with celebrities or civilians) do not have any impact on the stock price. Moreover, when business owners in Thailand obtain top offices in the government, the market valuation of their firms experiences substantial increases (Bunkanwanicha & Wiwattanakantang, 2008). Also, Wong and Hooy (2018) present evidence that stable political connections (firms with government links and political directors) are associated with higher Tobin's Q for Malaysian listed firms.

However, more recent evidence also suggests that political connections at the board level might bring more damage than good for the firm if not managed well

(Chen et al., 2017). Several studies in the United States and other countries present contradictory findings regarding the benefits of political directors. For example, Kang and Zhang (2018) directly question the role of political directors and suggest two possible views to explain the motivation for firms to appoint political directors. First, political directors might function as essential resource providers and are thus beneficial (value-enhancing view), especially in regulated industries and for companies with government contracts. Second, political directors might dent the board monitoring function due to their social connections with the CEO and the director's busyness, thus making them attractive to CEOs (rubber stamp view).

Kang and Zhang (2018) studied a large sample of nomination data for U.S. publicly traded firms from 1990 to 2007. They found that a political director's nomination is likelier to be associated with an adverse stock market reaction. The finding supports the rubber stamp view of political directors. Notably, those negative impacts only exist in nonregulated industries or firms with little government sales, suggesting political directors' resource provision roles are beneficial only in certain conditions, supporting the value-enhancing view. Nevertheless, the value-enhancing view does not mean that firms with political directors outperform their peers in highly regulated industries. Instead, it just slightly offsets the negative impact of having political directors.

Studies in countries other than the United States also yield similar results. For example, Gray, Harymawan, and Nowland (2016) study the director nomination among Australian listed firms and find no convincing evidence indicating that nominating a prominent politician will enhance firm valuation. Similarly, Chen et al. (2017) constructed an index that measures the firm level of political connections in China. They documented a U-shaped relationship between firm value and political connections. The findings suggest that having political ties at a lower level is beneficial but detrimental to firm valuation at a higher level.

Previous studies suggest that the benefits of political connections are contingent on the firms' resources needed (Pfeffer & Salancik, 1978). Companies in highly regulated industries may benefit from military directors more since those military directors are in a better position to help seek valuable resources from the government. Based on the resource dependence theory and CPA literature (Hillman et al., 2004; Lux

et al., 2011; Pfeffer & Salancik, 1978), we thus hypothesize that firms in Thailand will appoint military directors to cultivate the benefits of political connections when they operate in a government-related business or an industry with relatively burdensome government regulations. Further, the stock price will react positively to such appointments.

Hypothesis 3.1: According to resource dependence theory, Thai firms are more likely to appoint military directors if they are in heavily regulated industries, or if they depend on government contracts/business, or if they have government equity ownership.

Hypothesis 3.2: The market reaction to the nomination of a military director by a Thai firm will be positive if the firm is in a heavily regulated industry, or the firm depends on government contracts/business, or if the firm has government equity ownership.

Besides firms in regulated industries, firms in less competitive sectors can also benefit from political connections by adopting defensive strategies to raise entry requirements, limit substitution products or services, or hamper direct competition through protective pricing and government restrictions (Baldwin & Magee, 2000). For instance, traditional industries threatened by new competitors often engage in CPA to limit their boundary span or persuade the government to maintain the current regulation (Shaffer, 1995). Likewise, this situation applies to firms facing international competition. Firms might try to prevent foreign competitors from entering the domestic market or at least delay their penetration through political means (Fordham & McKeown, 2003; Hansen, 1990). Empirical evidence also supports the notion that international competition stimulates CPA (Baldwin & Magee, 2000; Beaulieu & Magee, 2004; Drope & Hansen, 2004; Hansen, 1990). For example, Drope and Hansen (2004) find that firms are more willing to engage in CPA when they face international competition, and the level of CPA positively determines the probability of affirmative decisions on anti

dumping cases. In other words, the political connection might serve a value-enhancing role for those less competitive industries.

Hypothesis 3.3: Thai firms in less competitive industries are more likely to appoint military directors.

Hypothesis 3.4: The market reaction to the nomination of a military director by a Thai firm will be positive if the firm is in a less competitive industry.

On the contrary, if the firms are not in highly regulated industries, there is no significant government business coalition, or the product market is highly competitive, nominating military directors may raise more concerns about corporate governance among the investors. In particular, firms without a clear government affiliation might face more drawbacks than benefits if they appoint military directors on their boards.

First of all, when firms have limited government-related business transactions or operate under loose government oversight, the resource provision benefits of the directors are far less valuable to the firm's ongoing operations (Hillman & Dalziel, 2003). After all, those firms have limited demand for government resources.

Second, allowing military directors to sit on the board hampers the board's monitoring role, as those military directors might simply rubber-stamp CEO decisions (Kang & Zhang, 2018). Apart from the rubber-stamp view, Sun, Hu, and Hillman (2016) argue that appointing a political director to the board helps block-holders to advance their ability to expropriate minority shareholders of Chinese firms. Given the prevailing family ownership among Thai listed firms (Wiwattanakantang, 2001), it is likely that appointing military directors to the board will exacerbate the Type II agency costs between majority shareholders and minority shareholders (Dalton, Hitt, Certo, & Dalton, 2007).

Third, appointing a military director as an independent director, or even assigning him/her to the audit committee, represents a fundamental mismatch between the skillset of military directors and the role of independent directors and audit committee members. Agency theorists often contend that board independence is essential for monitoring purposes (Anderson, Mansi, & Reeb, 2004; Farber, 2005; Liu, Miletkov, Wei, & Yang, 2015; Neville, Byron, Post, & Ward, 2019). They argue that a board dominated by outside directors will be less biased towards executives and

controlling owners and is more likely to side with minority shareholders. Moreover, financial and accounting expertise is critical for audit committee members to perform their duties (Bédard & Paquette, 2021; Chen & Komal, 2018). After they devote most of their career to the armed forces, military directors are unlikely to have sufficient business education and experience in financial and accounting matters. Therefore, detecting problems and wrongdoings, such as earnings management (Klein, 2002a) and fraud, is harder for them. Those fundamental mismatches likely create more significant agency costs (Jensen & Meckling, 1976).

Finally, prior studies suggest that product market competition is a disciplining mechanism for managers, as they are consistently under pressure to maintain or advance their market share (Giroud & Mueller, 2010; Yu, Li, & Yang, 2017). Hence, intense market competition can substitute for internal governance mechanisms to ensure executives follow good corporate governance practices (Girotti & Salvadè, 2022; Tian & Twite, 2011). Thus, the board's monitoring role is less relevant in such a context, and instead, the advice and counseling function of the board is more critical (Hillman & Dalziel, 2003). Military directors, due to their limited business knowledge and experience, are less likely to provide relevant advice and counseling to executives (Kim & Rasheed, 2014)

Following the above argument, the capital market reaction to military director appointments is expected to be more harmful to firms without clear ties to the government and firms operating in highly competitive markets. We, therefore, develop the hypothesis below:

Hypothesis 3.5: Market reactions to military director nominations will be negative if firms are operating in less regulated industries, and have few government-related business transactions, and when firms are operating in a highly competitive market.

3.4 Methodology and Data

3.4.1 Data Collection

This study uses secondary data of publicly listed Thai firms from 2006 to 2019. The period covers the most recent two coup d'états due to their intrinsic similarity (Baker, 2016) and their aftermath since 2014 when the prime minister of Thailand was a former general (until currently in 2023). To avoid potential survivorship bias, the sample chosen for this study comprised all firms listed in the SET100 according to the index's historical constituents, which represents Thailand's top 100 publicly listed companies based on their market capitalization. I adopted a smaller sample of 100 listed firms for two reasons. First, the top 100 firms in Thailand already represent more than 75% of the total market valuation of the Thai stock market. Second, firms other than the top 100 do not have sufficient trading volume and analyst coverage. Thus, we might not be able to observe an efficient market reaction to a director's appointment at smaller firms.

The number of companies covered each year is shown in Table 3.1. Please note that the SET 100 index constituents are revised every six months. Therefore, the number of companies covered in the SET 100 index during a calendar year is larger than 100, as my dataset includes the indexed firms in both revisions. I use the SET SMART database to identify the nomination dates of directors in Thailand during this time frame. However, if the director nomination information is not readily available, hand collection through cross-reference with the firm annual report is necessary. I then match the nomination data with fundamental, accounting, and stock price data from Worldscope. Furthermore, companies operating within the financial sector have been omitted from the sample due to the unique regulations that govern them, which significantly impact their financial attributes and make them incomparable to businesses in other sectors (Jiraporn et al., 2006; Papangkorn et al., 2021).

Table 3.1 Number of Companies covered in the SET100 index 2006 to 2018

YEAR	SET100 Index Constituents								
	Agro&Food	Consumer	Financial	Industrial	Prop&Cons	Resources	Services	Technology	Total
2006	6	0	22	11	24	11	18	14	106
2007	5	1	19	7	27	13	20	13	105
2008	6	0	20	13	28	11	22	11	111
2009	7	1	17	12	24	15	21	10	107
2010	7	1	14	11	25	14	22	12	106
2011	7	1	14	10	25	13	22	12	104
2012	9	0	14	9	26	14	21	12	105
2013	8	0	12	7	32	17	24	11	111
2014	6	0	14	3	31	14	29	11	108
2015	10	0	14	2	27	18	28	12	111
2016	7	0	14	2	30	18	26	12	109
2017	9	0	14	3	25	23	30	9	113
2018	8	0	13	3	23	24	31	9	111
Total	95	4	201	93	347	205	314	148	1,407

This table presents the SET100 index constituents and their industry presence from 2006 to 2018. The SET100 index is revised every six months, and this study considers both revisions. Therefore, the number of firms will be higher than 100 because I include all firms in both revisions for any given year. The Stock Exchange of Thailand classifies the listed firms into the following industries: Agro & Food, Consumer Products, Financials, Industrial, Property & Construction, Resources, Service, and Technology. The Financial Sector will be later removed when performing the analysis.

3.4.2 Methodology

I use a probit model to analyze the data and test the two hypotheses (3.1 and 3.3) about which firms appoint military directors. The probit regression equation is the following

$$Probit(Connection_{i,j,t})$$
$$= \beta_0 + \beta_1 GovSales_{i,j,t-1} + \beta_2 GovOwn_{i,j,t-1}$$
$$+ \beta_3 Concentration_{i,j,t-1} + \beta_4 Size_{i,j,t-1} + \beta_5 ROA_{i,j,t-1} + \beta_6 Leverage_{i,j,t-1}$$
$$+ \beta_7 Growth_{i,j,t-1} + \beta_8 GovStatus_t + \sum \gamma\, IndustryDummy + \varepsilon_{i,t}$$

Where *i* symbols listed firms, *j* symbols industries based on SET Industry Group and Sector classification structure, and *t* symbols years. The sample covers all constituent firms on the SET 100 index of the Stock Exchange of Thailand from year 2006 to 2018. $Connection_{i,j,t}$ is the dependent variable, which equals one if firm *i* in industry *j* has at least one military director sitting on the Board of Directors in year *t*, or zero otherwise. Notably, some companies are affiliated with prominent military figures in Thailand by assigning the spouses or relatives of generals to the board. This attempt can cover up military ties or create connections with generals currently serving in the RTA (who are thus not allowed to serve as board members). I regard those representatives of military personnel as military directors and include them in the measure of *Connection*.

GovSales is a dummy variable that equals one if firm *i* has government-related business transactions and zero otherwise. *GovOwn* is a dummy variable that equals one if firm *i* has a government ownership stake. *Concentration* indicates product competitiveness, as defined below in Section 3.4.3. Following prior literature, I also adopt several control variables for firm-specific and industry-specific characteristics (Brick & Chidambaran, 2010; Kouwenberg & Phunnarungsi, 2013; Wiwattanakantang, 2001). *Size* is the natural logarithm of total assets, *Leverage* is the financial leverage ratio, and *Growth* is the sales growth rate. *GovStatus* is a binary variable equal to one if Thailand is under a military government in year *t*, and zero if Thailand is under a civilian government in year *t*. Prior studies demonstrate that military directors' presence increases when the country is under a military regime (Bunkanwanicha & Wiwattanakantang, 2008; Peng et al., 2001). I classify Thailand as under a military government if the head of the state is a current or former general of the RTA (years 2006 to 2007 and year 2014 to 2018) and under a civilian government otherwise. Finally, the

variable *IndustryDummy* is a set of binary dummies for the industry firm *i* belong to based on the SET standards.

I use the event study methodology to test hypotheses 3.2, 3.4, and 3.5 about the market reaction to military director appointments. I use a short-window event study to investigate the market reaction to Thai-listed companies' announcements of military director appointments. Moreover, to ensure military director appointments drive the abnormal return, we exclude nomination data that coincide with any confounding events taking place simultaneously, such as the release of company earnings or annual reports. I focus on abnormal returns for days -1, 0, and +1, separately, and the 3-day event window (days -1, 0, +1 combined), where day 0 is the announcement date of the nomination.

Following a study conducted in the Thai context adopting a similar methodology (Kouwenberg & Phunnarungsi, 2013), I propose the following regression equation with control variables.

$$CAR_{i,j,t} = \beta_0 + \beta_1 GovSales_{i,j,t-1} + \beta_2 GovOwn_{i,j,t-1} + \beta_3 Concentration_{i,j,t-1} + \beta_4 Size_{i,j,t-1} + \beta_5 ROA_{i,j,t-1} + \beta_6 Leverage_{i,j,t-1} + \beta_7 Growth_{i,j,t-1} + \beta_8 BooktoMarket_{i,j,t-1} + \beta_9 Block_{i,j,t-1} + \beta_{10} GovStatus_t + \varepsilon_{i,t}$$

CAR is the three-day cumulative abnormal return around the announcement of military director appointments. *Booktomarket* is the ratio of the book value of equity and the market value of equity. *Block* is the percentage of shares that are closely held (held by block holders with ownership stakes exceeding five percent of the company's equity).

Table 3.2 presents the definitions of the variables used in this study and their expected signs. When exploring why firms affiliate with the military government, we control for the following firm-level variables: *Size*, *ROA*, *Leverage*, *Growth*, and *GovStatus*. *Size* is the natural logarithm of a firm's total assets. Due to their previous high-ranking status in the Royal Thai military, military directors are more likely to join a large firm. *ROA* is a firm's net income ratio to the average total assets. Firms with higher ROA are less likely to hire a military director, as they have less concern for acquiring external resources. *Leverage* is the ratio of total debt to total equity. I control for leverage because firms with higher leverage might face more operational pressure

and, therefore, need assistance from external sources. They are thus more likely to appoint military directors. *Growth* is the growth rate of sales. Firms with higher sales growth are less likely to rely on external resources and, therefore, unlikely to hire military directors. *GovStatus* is a dummy variable that equals one if Thailand is under a military government and 0 otherwise. I expect firms to affiliate with a military director when the military runs the government and are less likely to do so when the prime minister is democratically elected and not a former general. We adopt two additional control variables for the event study to address Thailand's potential stock liquidity problems, *Booktomarket* and *Block*. However, I do not expect those two variables to impact the cumulative abnormal returns.

Table 3.2 Definition of Variables and expected Sign

This table presents the definitions of all variables used in the regression model and event study, the expected sign of each variable in the probit model for military directors, and the regression model explaining the cumulative abnormal returns after announcements of new military director appointments.

Variable	Definition	Expected Sign Connection	Expected Sign CAR
Dependent variable			
Connection	A dummy variable that equals 1 for firms with a military director on the board of directors and 0 otherwise		
AR -1,0,1	Abnormal return during the event window (days -1, 0, +1)		
CAR3	Three-day Cumulative Abnormal return during the event window		
CAR7	Seven-day cumulative abnormal return during the event window		

Table 3.2 Definition of Variables and expected Sign (cont.)

Variable	Definition	Expected Sign Connection	Expected Sign CAR
Independent variables			
GovSales	Dummy: 1 for firm i has government-related business transactions; 0 otherwise.	+	+
GovOwn	Dummy: 1 for firm i has government ownership stake; 0 otherwise.	+	+
GovFrim	Dummy: 1 for firm I has a government affiliation either GovSales or GovOwn; 0 Otherwise.	+	+
Concentration	Herfindahl-Hirschman index for the industry/sector at year t, scaled by 1000	+	+
CR4	Percentage of total sales of four largest firms to total industry/sector sales at year t.	+	+
Controls for company characteristics			
Size	Natural logarithm of total assets		
ROA	Ratio of the net income and firm's average total assets, winsorized at the 99 percentile (right tail).		
Leverage	Total debt to assets ratio, winsorized at the 1 and 99 percentiles (both tails).		
Growth	The growth rate of sales, winsorized at the 99 percentile (right tail).		
GovStatus	Dummy: 1 for Thailand is under a military government in year t; 0 otherwise		
Booktomarket	The ratio of the book value of equity and the market value of equity		
Block	Total percentage of shares that are held by owners with at least a 5% ownership stake		

3.4.3 Measurement of product competition

Our primary measure of product competition is the Herfindahl-Hirschman index (HHI). Firms scoring high on the HHI means the market competition is low. The HHI is calculated as follows:

$$HHI_{j,t} = \sum_{i=1}^{N_j} s_{i,j,t-1}^2$$

where the $S_{i,j,t-1}$ is the market share of firm *i* in industry/sector *j* in year *t-1*. We use firms' annual sales as the proxy for market share, as Giroud and Mueller (2010) suggested. The benchmark of HHI is based on the SET Industry Group and Sector classification structure. Which includes eight Industry Groups and 28 Business Sectors. Table 3.3 summarizes the market competitiveness across all sectors that companies in our database present. Our entire set of data covers 24 business sectors classified by the Stock Exchange of Thailand, missing only the Mining sector from the Resources Industry, Property Fund & REITs from Property & Construction Industry, Paper & Printing Materials sector from Industrials Industry, and Personal Products & Pharmaceuticals sector from Consumer Products Industry.

We also adopt an additional measure of product market competition, the four-firm concentration ratio (CR4), as a robustness check. Since our data relies on only publicly listed firm and exclude private firms, our measurements might paint an unreliable image of the level of concentration in an industry, especially in those where private enterprises are also responsible for a sizable portion of industry sales (Ali, Klasa, & Yeung, 2008). The four-firm concentration ratio assesses the level of market concentration within a specific industry. It calculates the proportion of the sector's total revenues controlled by the top four companies. A higher CR4 score denotes a more concentrated industry where a few dominating firms control a sizable percentage of the market, potentially affecting market dynamics such as pricing and competition.

According to the data presented in Table 3.3, only five business sectors, namely Property development, Automotive, Media & Publishing, Packaging, and Fashion, consistently remain competitive across our sample years. Other business sectors are generally concentrated with varying degrees. The Construction Material sector is the most concentrated industry, with Siam Cement Group dominating the

domestic market. The most competitive market is the Property development sector, with more than 50 listed property developers, each with a sizable market share.

3.4.4 Measurement of cumulative abnormal returns

We follow Kouwenberg and Phunnarungsi (2013) to measure the abnormal return for Thai stocks. We concentrate on abnormal returns for days − 1, 0, and + 1 separately and the 3-day event window (days − 1, 0, + 1 combined), where day 0 is the day the military director appointment was announced. The abnormal return (*AR*) for firm *j* on day *t* is defined as

$$AR_{j,t} = r_{j,t} - E(r_{j,t})$$

where rj,t is a continuously compounded total return for the stock of firm j, and E(rj,t) is the expected return for firm j based on the market model. We follow Scholes and Williams (1977) to estimate the beta for the market model to account for illiquidity and thin trading in the Thai stock market.

Table 3.3 table presents the competitive operating environment in Thailand's various industries/sectors. Thailand has classified its listed firms into eight broad Industry Groups and 28 Business sectors. Although our data include only SET100 index constituents, they are widely distributed in 24 business sectors. According to the definition of the Herfindahl-Hirschman index, A market with an HHI below 1,500 is considered a competitive marketplace, an HHI of 1,500 to 2,500 is moderately concentrated, and an HHI of 2,500 or greater is highly concentrated.

Table 3.3 Market Competitiveness of Thai listed firms from 2005 to 2018

Classification of Industry Group and Sector		Herfindahl-Hirschman Index													
Industry	**Sector**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
1. Resources															
1.	Energy & Utilities	2,524	2,359	3,100	3,336	3,285	3,301	3,460	3,509	3,438	3,509	3,092	2,369	2,423	2,434
2.	Mining	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
2. Property & Construction															
1.	Property Development	658	553	559	535	598	557	577	586	536	524	534	502	471	437
2.	Construction Materials	5,561	5,803	5,812	6,095	5,581	5,640	6,109	5,750	5,848	5,520	5,196	5,252	5,183	5,286
3.	Property Fund & REITs	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
4.	Construction Services	2,222	1,930	1,959	1,597	1,474	1,639	1,625	1,358	1,249	1,163	1,243	1,220	1,335	1,356
3. Financial															
1.	Banking	1,198	1,162	1,226	1,198	1,136	1,269	1,320	1,490	1,486	1,537	1,559	1,576	1,578	1,551
2.	Finance and Securities	683	840	1,112	1,282	1,177	962	1,244	1,528	2,143	1,379	1,299	1,712	1,467	1,280
3.	Insurance	1,143	1,225	1,334	1,804	1,885	2,057	1,943	2,006	2,025	2,192	2,323	2,495	2,565	1,946

Table 3.3 Market Competitiveness of Thai listed firms from 2005 to 2018 (cont.)

Classification of Industry Group and Sector		Herfindahl-Hirschman Index													
Industry	**Sector**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
4. Services															
1.	Transportation & Logistics	1,907	1,988	2,031	2,210	1,719	1,501	1,430	1,327	1,318	1,232	1,434	1,521	1,418	1,347
2.	Commerce	1,797	1,785	1,842	1,881	1,775	1,785	1,769	1,711	1,950	2,178	2,241	1,711	1,972	2,011
3.	Health Care Services	1,930	2,249	2,365	2,349	2,310	2,385	2,829	2,823	2,531	2,418	2,485	2,480	2,479	2,497
4.	Tourism & Leisure	1,169	1,351	1,587	1,357	1,533	1,674	1,712	1,873	2,025	1,966	2,015	1,972	1,858	1,785
5.	Media & Publishing	869	950	1,037	1,154	1,043	1,144	1,081	1,065	1,044	1,042	991	899	780	737
6.	Professional Services	5,203	5,017	5,041	5,084	5,461	5,748	7,185	6,612	6,316	6,575	4,835	3,278	3,294	3,399
5. Industrials															
1.	Petrochemicals & Chemicals	2,501	2,117	2,050	1,958	2,732	3,797	4,795	4,849	4,544	4,539	4,066	3,838	4,335	4,438
2.	Industrial Materials & Machinery	1,596	1,725	1,690	1,595	1,597	1,746	1,653	1,538	1,441	1,355	1,386	1,314	1,293	1,268
3.	Automotive	704	728	814	860	922	920	980	974	911	913	877	916	920	933
4.	Paper & Printing Materials	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
5.	Packaging	1,072	1,070	1,117	1,109	1,179	1,169	1,174	1,109	1,078	1,090	1,063	1,020	1,008	987
6.	Steel	1,050	932	908	911	1,026	1,067	967	1,099	1,210	1,143	714	690	747	796

Table 3.3 Market Competitiveness of Thai listed firms from 2005 to 2018 (cont.)

Classification of Industry Group and Sector		Herfindahl-Hirschman Index													
Industry	**Sector**	**2005**	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**
6. Technology															
1.	I Information & Communication Technology	1,376	1,361	1,626	1,635	1,488	1,535	1,547	1,696	1,650	1,628	1,663	1,683	1,685	1,756
2.	Electronic Components	2,425	2,596	2,633	3,549	3,692	3,433	3,711	4,098	3,556	3,667	3,641	2,980	3,024	3,006
7. Agro & Food Industry															
1.	Food and Beverage	2,048	2,035	2,008	1,992	2,150	2,037	1,878	2,468	2,690	2,589	2,510	2,587	2,623	2,681
2.	Agribusiness	2,317	2,635	3,031	3,149	3,135	3,709	4,463	3,625	3,766	3,182	3,289	3,664	3,458	3,066
8. Consumer Products															
1.	Fashion	1,075	1,013	1,036	987	879	987	1,024	1,040	1,135	1,174	1,311	1,177	1,104	1,000
2.	Home & Office Products	1,839	1,924	2,258	2,017	1,699	1,653	1,815	1,930	1,979	1,760	1,683	1,580	1,796	1,870
3.	Personal Products & Pharmaceuticals	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

For each day in the event period, the average abnormal return (*AAR*) is averaged across the number of military director nominations,

$$AAR_t = \frac{\sum_{j=1}^{j=N_t} AR_{j,t}}{N_t}$$

where N_t is the number of military director nominations over which AR is averaged on day *t*. The cumulative abnormal return (*CAR*) on the announcement of director nomination of firm *j* over days (t_1, t_2) is measured as

$$CAR^{j}_{t_1,t_2} = \sum_{t=t_1}^{t_2} AR_{j,t}$$

The cumulative average abnormal return over days (*t1*, *t2*) is measured as

$$CAAR_{t1,t2} = \frac{\sum_{J=1}^{j=N} CAR^{j}_{t_1,t_2}}{N}$$

where *N* is the number of cumulative abnormal returns.

3.4.5 Descriptive Statistics

Table 3.4 provides a comprehensive account of the distribution of military directors at Thai SET100 firms. The study aims to investigate military directors' overall presence and trends across different types of firms and overtime. Panel A of the table illustrates the prevalence of military directors across firms with varying ownership structures, product markets, and industry types. To denote product market concentration, we employ the median HHI value of 1650.257 as the threshold. The data analysis reveals that government- and non-government-related firms are more likely to have military directors during the military regime. However, they are less likely to do so during the civilian government. From 2009 to 2013, a period characterized as civilian government in Thailand, the mean percentage of government-affiliated firms with military directors was calculated to be 29.22%.

In contrast, during the tenure of General Prayut Chan-o-cha from 2015 to 2018, under a military government regime, the mean percentage of government-affiliated firms with military directors rose to 37.17%. A similar trend was also observed among non-governmental firms, with an average of 10.84% during the civilian government period and 14.37% during the military government period for the same time

span. Government-related firms displayed a relatively higher propensity to include military directors on their boards throughout our sample period.

The firms operating within concentrated industries exhibit comparable patterns, with an average of 20.62% of such firms having at least one military director during the period spanning from 2009 to 2013. This proportion further increased to 24.39% during the period from 2015 to 2018. A similar trend is observed among firms operating in competitive industries, where the average percentage of firms with military directors was 13.26% during the civilian government phase (2009-2013) and rose to 21.66% during the military government phase (2015-2018). Notably, firms operating within concentrated sectors display a greater inclination to have military directors serving on their boards compared to firms in competitive industries, with an average of 23.46% versus 15.54%, respectively, across the entirety of the sample period.

Concerning the distribution of industries, it is evident that companies operating in the resources industry are more likely to have military directors on their boards, followed by those in the service industry. This finding is consistent with our hypothesis, as the resource industry is subject to significant regulations in nearly all countries. In contrast, the agro & food and technology industry exhibits the lowest probability of having military directors on their boards. These two industries are often subjected to less government regulation, which may account for their lower likelihood of having military directors on the board.

These patterns are consistent when examining the distribution of companies with one military director and those with at least two military directors, as presented in Panel B and C. One noteworthy observation is that government-related firms almost exclusively comprise firms with more than one military director, particularly after 2011.

Table 3.5 presents descriptive statistics for all variables used in the study. Firms were chosen based on their listing in the SET100 index, so any firm occurring in the SET100 in any year from 2006 to 2018 is included in the dataset starting from 2005 (if data is available). Therefore, there is no survivorship bias for the sample period of 2006-2018.

Table 3.4 Descriptive Statistics for the Number and Proportion of Firms with Military Directors

This table presents the descriptive statistics of the number and proportion of firms with military directors across government versus non-government firms, concentrated versus competitive industries, and different SET industries. Panel A presents the number and proportion of firms with at least one military director on the Board. Panel B presents the overall distribution of firms with precisely one military director. Panel C shows the distribution of firms with more than one military director.

Panel A: Descriptive Statistics of Firms with at least one Military directors from 2006 to 2018

Year	Govenfirm		Concentration		AGRO		FINCIAL		INDUS		PROPCON		RESOURC		SERVICE		TECH		Total	
	No	Yes	No	Yes	No	%	No	%	No	%	No	%	No	%	No	%	No	%	No	%
2006	15.4%	34.1%	13.8%	33.3%	0	0.00%	2	9.1%	4	36.4%	7	29.2%	4	36.4%	6	33.3%	1	7.1%	24	22.6%
2007	11.9%	36.8%	12.3%	31.3%	0	0.0%	2	10.5%	2	28.6%	6	22.2%	7	53.8%	5	23.8%	1	7.7%	22	21.0%
2008	11.0%	34.2%	14.1%	25.5%	0	0.0%	3	15.0%	2	15.4%	5	17.9%	5	45.5%	5	22.7%	1	9.1%	21	18.9%
2009	15.5%	27.8%	13.3%	27.7%	0	0.0%	3	17.6%	3	25.0%	3	12.5%	6	40.0%	5	22.7%	2	20.0%	21	19.6%
2010	14.1%	25.7%	11.3%	24.5%	0	0.0%	3	21.4%	2	18.2%	4	16.0%	4	28.6%	6	26.1%	1	8.3%	19	17.9%
2011	8.2%	32.3%	12.5%	18.8%	0	0.0%	2	14.3%	2	20.0%	3	12.0%	6	46.2%	3	13.0%	1	8.3%	16	15.4%
2012	6.9%	33.3%	14.0%	16.7%	0	0.0%	2	14.3%	2	22.2%	2	7.7%	6	42.9%	3	14.3%	1	8.3%	16	15.2%
2013	9.5%	27.0%	15.1%	15.5%	0	0.0%	2	16.7%	2	28.6%	2	6.3%	5	29.4%	5	20.8%	1	9.1%	17	15.3%
2014	4.3%	30.8%	14.0%	13.7%	0	0.0%	2	14.3%	0	0.0%	2	6.5%	5	35.7%	6	20.7%	0	0.0%	15	13.9%
2015	9.7%	30.8%	14.0%	20.4%	1	10.0%	3	21.4%	0	0.0%	2	7.4%	6	33.3%	7	25.0%	0	0.0%	19	17.1%
2016	16.4%	35.7%	24.0%	23.7%	2	28.6%	6	42.9%	0	0.0%	3	10.0%	6	33.3%	7	26.9%	2	16.7%	26	23.9%
2017	15.9%	40.9%	19.0%	29.6%	3	33.3%	5	35.7%	0	0.0%	2	8.0%	9	39.1%	10	33.3%	0	0.0%	29	25.7%
2018	15.4%	41.3%	29.5%	23.9%	2	25.0%	6	46.2%	1	33.3%	3	13.0%	8	33.3%	9	29.0%	0	0.0%	29	26.1%
Total	11.8%	33.5%	15.5%	23.5%	8	8.4%	41	20.4%	20	21.5%	44	12.7%	77	37.6%	77	24.2%	11	7.4%	274	19.5%

Table 3.4 Descriptive Statistics for the Number and Proportion of Firms with Military Directors (cont.)

Panel B: Descriptive Statistics for the distribution of Military directors from 2006 to 2018 (firms with only one military director)

Year	GovernFirm		Concentration		Industry Distribution							Total
	No	Yes	No	Yes	AGRO	FINCIAL	INDUS	PROPCON	RESOURC	SERVICE	TECH	
2006	12.31%	26.83%	12.07%	25.00%	0	1	4	5	4	4	1	19
2007	8.96%	26.32%	10.53%	20.83%	0	2	1	5	4	3	1	16
2008	6.85%	28.95%	10.94%	19.15%	0	3	1	3	5	3	1	16
2009	14.08%	25.00%	13.33%	23.40%	0	3	3	2	5	4	2	19
2010	14.08%	20.00%	13.21%	18.87%	0	3	2	3	3	4	2	17
2011	6.85%	25.81%	8.93%	16.67%	0	2	2	2	5	1	1	13
2012	6.94%	15.15%	10.53%	8.33%	0	1	2	2	2	2	1	10
2013	8.11%	13.51%	11.32%	8.62%	0	1	2	2	1	4	1	11
2014	4.35%	20.51%	8.77%	11.76%	0	2	0	2	4	3	0	11
2015	9.72%	17.95%	8.77%	16.67%	1	3	0	2	4	4	0	14
2016	16.42%	16.67%	16.00%	16.95%	2	6	0	3	2	3	2	18
2017	15.94%	15.91%	9.52%	19.72%	3	5	0	2	2	6	0	18
2018	13.85%	19.57%	18.18%	14.93%	2	5	1	3	2	5	0	18
	10.57%	20.84%	11.58%	16.88%	8	37	18	36	43	46	12	200

Table 3.4 Descriptive Statistics for the Number and Proportion of Firms with Military Directors (cont.)

Panel C: Descriptive Statistics for the distribution of Military directors from 2006 to 2018 (firms with more than one military director)

Year	GovernFirm		Concentration		Industry Distribution							Total
	No	Yes	No	Yes	AGRO	FINCIAL	INDUS	PROPCON	RESOURC	SERVICE	TECH	
2006	3.08%	7.32%	1.72%	8.33%	0	1	0	2	0	2	0	5
2007	2.99%	13.16%	3.51%	10.42%	0	1	1	1	2	2	0	7
2008	4.11%	5.26%	3.13%	6.38%	0	0	1	2	0	2	0	5
2009	1.41%	2.78%	0.00%	4.26%	0	0	0	1	0	1	0	2
2010	1.41%	5.71%	0.00%	5.66%	0	0	0	1	0	2	0	3
2011	1.37%	6.45%	3.57%	2.08%	0	0	0	1	0	2	0	3
2012	0.00%	18.18%	3.51%	8.33%	0	1	0	0	4	1	0	6
2013	0.00%	13.51%	3.77%	5.17%	0	1	0	0	3	1	0	5
2014	0.00%	10.26%	5.26%	1.96%	0	0	0	0	1	3	0	4
2015	0.00%	12.82%	5.26%	3.70%	0	0	0	0	2	3	0	5
2016	0.00%	19.05%	8.00%	6.78%	0	0	0	0	4	4	0	8
2017	0.00%	25.00%	9.52%	9.86%	0	0	0	0	7	4	0	11
2018	0.00%	21.74%	9.09%	8.96%	0	0	0	0	6	4	0	10
	1.10%	12.83%	4.10%	6.44%	0	4	2	8	29	31	0	74

Table 3.5 Descriptive Statistics of the Sample

The table utilizes a sample comprising 1,407 publicly listed companies on the SET100 index in Thailand, excluding companies lacking Worldscope financial statement data to prevent potential biases. Detailed definitions of all variables used in the analysis are provided in Table 3.2. Descriptive statistics of the sample are presented in the table, with Panel A containing the descriptive statistics of the variables employed in the probit model and Panel B outlining the descriptive statistics of the variables utilized in the event studies.

***Panel A:** Descriptive Statistics for the Probit Model*

Variable	No of Obs	Mean	SD	Min	Max	Median	Skewness	Kurtosis
Connection	1206	0.193	0.395	0	1	0	1.554	3.415
GovSales	1206	0.173	0.379	0	1	0	1.726	3.980
GovOwn	1206	0.158	0.365	0	1	0	1.871	4.502
Concentration	1206	2.064	1.311	0.471	6.109	1.785	1.091	3.971
CR4	1206	0.661	0.169	0.330	1.000	0.702	-0.636	2.448
Size	1206	17.139	1.316	13.728	21.522	17.059	0.315	3.048
ROA	1202	9.228	8.354	-45.550	38.380	8.280	0.154	8.992
Leverage	1206	0.884	0.911	0.000	6.430	0.691	2.774	14.655
Growth	1195	13.764	30.206	-89.030	177.980	9.600	2.283	13.065
GovStatus	1206	0.541	0.498	0	1	1	-0.166	1.028

Table 3.5 Descriptive Statistics of the Sample (cont.)

Panel B: Descriptive Statistics for the Event Study

Variable	No of Obs	Mean	SD	Min	Max	Median	Skewness	Kurtosis
CAR3	81	-0.044	0.478	-1.397	1.104	-0.078	-0.038	3.723
CAR7	81	-0.096	1.135	-3.256	2.681	-0.161	0.021	3.625
GovFirm	81	0.852	0.357	0.000	1.000	1.000	-1.981	4.924
Concentration	81	2.317	0.972	1.099	5.561	2.031	0.934	3.613
CR4	81	.740	0.080	0.518	0.940	0.730	-0.092	2.816
Size	81	19.032	1.478	14.478	21.830	19.071	-1.084	4.691
ROA	81	5.894	6.012	-10.550	23.460	6.090	0.033	3.601
Leverage	81	1.328	1.254	0.000	5.160	0.807	1.482	4.428
Growth	81	28.476	158.928	-79.010	1411.850	9.020	8.301	72.675
Booktomarket	81	0.877	0.583	0.065	3.485	0.763	2.416	11.008
Block	81	0.481	0.248	0.000	0.790	0.538	-1.007	2.670
GovStatus	81	0.654	0.479	0.000	1.000	1.000	-0.649	1.421

3.5 Empirical results

3.5.1 Explaining Military Directors' Presence on the Board

To test Hypothesis 3.1, I estimate a probit model with random effect to see whether corporations appoint military directors on their boards to fulfill the political resources needed in their operating environment using variables proxying for government sales dependence, government ownership, and other controls. Random effect models are preferred in this study because many independent variables, such as board size and percentage of military directors on board, are time-invariant and cannot be effectively assessed under the fixed effect model (Bell & Jones, 2015).

The baseline probit estimation results are presented in the first column of estimates in Table 3.6. The dependent variable is a binary variable that equals one if firms have at least one military director on the board in a given year and 0 otherwise.

The panel sample consists of all SET100 firms from 2006 to 2018. First, the results show that firms with government-related business transactions are less likely to have a military director on the board (significant at a ten percent level with a P-value equal to 0.053). Second, the result suggests that state-owned enterprises are more inclined to have a military director on their board (significant at a 5 percent level with a P-value equal to 0.041). Lastly, firms operating in the Resources and Service Industry are more likely to have military directors on their boards (both significant at a 5 percent level with a P-value of 0.045 and 0.027, respectively).

I further divided the data into two time periods, 2006–2013 and 2015 onwards, and the results are reported separately in columns four and five of Table 3.6. Thailand had never had a lengthy military administration before 2014, despite having a military coup in 2006 and RTA intervening in the civilian government multiple times. Because military generals constantly enter and exit the political sphere, it is uncertain whether the military director can consistently provide the resources required for the company's operations until 2014. After 2014, the political landscape in Thailand became more apparent with the amendment of the constitution and General Prayut Chan-o-cha's formal appointment as Thailand's Prime Minister. Therefore, companies might view military directors differently in these two periods.

The findings presented in columns four and five of the regression analysis indicate that the initially observed inverse relationship between Government Sales and Connection, as demonstrated in the baseline estimation, is primarily attributed to the period from 2006 to 2013. Similarly, the correlation between Government Ownership and Connection is only significant from 2006 to 2013. Despite the relationship between Government Sales and Connection contradicting Hypothesis 3.1, the transition between the two periods reflects a shift in the attitude of Thai corporations over time. To further verify our results, we perform a robustness check by rerunning the panel regression without controlling for industry type, presented in Appendix 1. The findings are consistent with those reported in Table 3.6. Additionally, we conduct a collinearity diagnosis to assess whether our relatively small sample size contains any multicollinearity issues. The results in column 1 of Appendix 3 indicate that our model is free from such problems.

Table 3.6 Military Directors' Presence on the Board

This table presents the estimation results for Hypothesis 3.1, using a sample of 1195 firm-level observations from 2006 to 2018. Firms in the consumer product industry are merged with those in the service industry, as there are only four companies in the consumer product industry for the entire sample period. Technology Industry is omitted as default. The dependent variable is the dummy variable indicating firms with at least one military director on the board in year *t* (*Connection*). Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

	(1)	(2)	(3)	(4)	(5)
Dependent variable	2006-2018	2006-2018	2006-2018	2006-2013	2015-2018
Constant	-5.692	-9.506**	-12.933***	-0.627	-16.25
	(5.24)	(4.65)	(4.58)	(4.14)	(25.36)
GovSales	-1.602*			-4.530**	-0.942
	(0.83)			(1.99)	(3.99)
GovOwn	3.779**			4.717**	10.626
	(1.85)			(1.98)	(21.47)
Concentrated		0.435**			
		(0.22)			
CR4			5.266**		
			(2.10)		
Size	0.006	0.162	0.189	-0.263	0.302
	(0.25)	(0.28)	(0.27)	(0.24)	(0.78)
ROA	0.015	0.015	0.008	0.005	0.006
	(0.02)	(0.02)	(0.02)	(0.02)	(0.10)
Leverage	0.548***	0.482**	0.472**	0.352	1.185
	(0.19)	(0.19)	(0.19)	(0.25)	(2.84)
Growth	0.002	0.002	0.002	-0.002	0.029
	0.00)	0.00)	0.00)	0.00)	(0.04)
GovStatus	0.275	0.325	0.342	0.562*	
	(0.24)	(0.21)	(0.22)	(0.33)	
Agro & Food	0.421	0.145	0.546	.	1.947
	(0.77)	(0.57)	(0.58)	.	(6.91)
Industrials	1.168	2.087***	2.466***	1.024	-2.692
	(0.87)	(0.80)	(0.89)	(0.86)	(8.42)

Table 3.6 Military Directors' Presence on the Board (cont.)

Dependent variable	(1) 2006-2018	(2) 2006-2018	(3) 2006-2018	(4) 2006-2013	(5) 2015-2018
Property & Construction	0.991	0.853	1.895**	1.443*	0.349
	(0.65)	(0.52)	(0.83)	(0.76)	(5.99)
Resources	1.832**	1.782**	2.107***	1.935	1.51
	(0.91)	(0.74)	(0.71)	(1.28)	(5.83)
Service	1.943**	2.248***	2.403***	1.560*	2.993
	(0.88)	(0.81)	(0.79)	(0.82)	(5.87)
No. of Obs.	1195	1195	1195	665	384
Chi-square test	27.05	32.4	33.15	14.54	0.89
p-value	0.0076	0.0007	0.0005	0.2047	1.000
Pseudo R2	0.078	0.054	0.062	0.121	0.163

Traditionally, the Thai political landscape is a three-pillar structure with the civilian government, RTA, and the royal families playing a significant role (Chambers & Waitoolkiat, 2016; Pongsudhirak, 2008). The rival relationship between the civilian government and RTA forces companies to choose a side, particularly firms relying on government contracts. Therefore, even after the 2006 coup, firms with government contracts appeared reluctant to appoint more military directors to their boards than other firms, which explains why the coefficient of *GovSales* was significantly negative during this period. However, this "one or other" attitude might have slowly changed after 2014, as it became more evident that RTA would stay in the political arena for an extended period, and the boundary between the civilian government and RTA became more blurred as time passed by. This may explain why the significant negative relationship between *GovSales* and *Connection* disappeared after 2014.

To fortify the reliability of our results, we conduct supplementary analyses utilizing propensity score matching. The dataset is stratified based on the presence of government-related sales, with firms having such sales designated as the treatment group. For each firm within the treatment group, we identify a comparable counterpart through propensity score matching, considering five firm characteristics (same as control variables in the probit model). Consequently, our treatment and control firms exhibit virtual homogeneity in terms of observable attributes, differing solely in the

presence or absence of government-related sales. We replicate the same procedure for *GovOwn*, with firms having government ownership as the treatment group. The results of the probit model based on propensity score matching are presented in Table 3.7.

Table 3.7 Military Directors' Presence on the Board: Propensity Score Matching

This table presents the estimation results for Hypothesis 3.1 based on propensity score matching, using a sample of 1195 firm-level observations from 2006 to 2018. Firms in the consumer product industry are merged with those in the service industry, as there are only four companies in the consumer product industry for the entire sample period. Technology Industry is omitted as default. The dependent variable is the dummy variable indicating firms with at least one military director on the board in year t (*Connection*). Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable	2006-2018	2006-2013	2015-2018	2006-2018	2006-2013	2015-2018
Constant	-4.953***	-1.169	-4.426**	-7.007***	-9.794***	-7.392***
	(0.79)	(1.04)	(1.76)	(1.40)	(1.59)	(2.72)
GovSales	0.265**	0.314*	-0.079			
	(0.11)	(0.17)	(0.24)			
GovOwn				-1.942***	-1.173***	-2.326***
				(0.29)	(0.32)	(0.46)
Size	0.214***	0.01)	0.198**	0.448***	0.553***	0.429***
	(0.04)	(0.06)	(0.10)	(0.08)	(0.09)	(0.16)
ROA	0.009	0.005	-0.031**	-0.011	-0.018**	-0.041*
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.02)
Leverage	0.236***	0.013	0.147	-0.064	-0.226***	-0.114
	(0.07)	(0.08)	(0.16)	(0.07)	(0.08)	(0.12)
Growth	0	0.001	-0.002	-0.002	0.003	-0.008
	0.00)	0.00)	0.00)	0.00)	0.00)	(0.01)
GovStatus	0.055	-0.304*		-0.247**	0.16	
	(0.11)	(0.17)		(0.11)	(0.17)	

Table 3.7 Military Directors' Presence on the Board: Propensity Score Matching (cont.)

Dependent variable	(1) 2006-2018	(2) 2006-2013	(3) 2015-2018	(4) 2006-2018	(5) 2006-2013	(6) 2015-2018
Agro & Food	-0.122	-0.088	-0.665	-0.348	-0.355	-0.28
	(0.24)	(0.25)	(0.63)	(0.33)	(0.32)	(0.57)
Industrials	-0.302	-0.356	0.211	-0.448	-0.072	0.373
	(0.25)	(0.31)	(0.68)	(0.31)	(0.30)	(0.52)
Property & Construction	-0.15	0.042	0.272	-0.38	-0.381	0.335
	(0.13)	(0.23)	(0.38)	(0.28)	(0.26)	(0.33)
Resources	-0.301*	-0.209	-0.126	-0.331	-0.544*	0.138
	(0.16)	(0.28)	(0.43)	(0.29)	(0.33)	(0.40)
Service	-0.104	-0.313	0.267	-0.113	-0.116	0.710*
	(0.16)	(0.24)	(0.39)	(0.28)	(0.26)	(0.39)
No. of Obs.	1176	704	371	1089	603	306
Chi-square test	51.38	14.86	23.03	60.66	54.41	32.28
p-value	0.000	0.189	0.011	0.000	0.000	0.000
Pseudo R2	0.053	0.022	0.064	0.073	0.084	0.124

The probit regression result presented based on propensity score matching displays a different result compared to our original findings presented in Table 3.6. The results in Table 3.7 suggest that firms with government-related business transactions are more inclined to have a military director on the board for both the whole sample period (significant at a one percent level with a P-value equal to 0.020) and the sample period of 2006 to 2013 (significant at a 10 percent level with a P-value equal to 0.069). This result is consistent with our hypothesis 3.1. On the contrary, firms with government ownership are less likely to have a military director on the board for both the whole sample (significant at a one percent level with a P-value equal to 0.000) and the dividend sample period of 2006-2013 (significant at a one percent level with a P-value equal to 0.000) or 2015-2018 (significant at a one percent level with a P-value equal to 0.000). This finding contradicts our hypothesis 3.1. The result seems to suggest that firms with significant government stakes are less likely to have military directors on board. A

possible explanation for such a result might be due to the fact that those state-owned enterprises have already established affluent government connections and, therefore, have less demand for additional government resources.

The contradictory findings presented in Tables 3.6 and 3.7 highlight the impact of employing propensity score matching as a methodological refinement. The adoption of propensity score matching offers a more nuanced understanding of the relationship between firms with government affiliation and the presence of military directors on corporate boards. The adoption of propensity score matching allows for a more rigorous examination of the hypothesized linkages, shedding light on nuanced associations that may not be evident in traditional regression analyses.

We now use the classification of firms into regulated versus nonregulated categories, as proposed by Civilize, Wongchoti, & Young (2015), to determine whether industry regulations affect a firm's decision to appoint a military director to the board. In particular, four industries in Thailand have been classified as regulated industries by Civilize, Wongchoti, & Young (2015), namely Property & Construction, Resources, Financials, and Technology. We thus create a dummy variable *Noregulated_Industry* equal to one if the firm does not belong to any of the four industries and 0 if otherwise. The result of our panel regression is displayed in Column 1 of Table 3.8. Moreover, some sectors appear to receive more regulation than others in Thailand. Specifically, we hypothesize that the following sectors receive more regulatory attention compared with others: Energy and utilities, Property Development, Banking, Finance and Securities, Insurance, Transportation and logistics, Health Care Services, Petrochemicals and chemicals, and Information and communication Technology. We thus create an additional dummy variable *Noregulated_Sector* equal to one if the firm does not belong to any of the sectors mentioned above and 0 if otherwise. The result of our panel regression is displayed in Column 2 of Table 3.8. Please note that we exclude the industry dummies to avoid any potential overlapping and multicollinearity problems. The result of our probit model suggests that industry/sector regulation has little impact on a firm’s decision to appoint a military director on board. This finding does not support our Hypothesis 3.1 that regulated firms are more likely to appoint military directors on their board.

Table 3.8 Military Directors' Presence on the Board: Regulated versus NonRegulated

This table presents the estimation results for Hypothesis 3.1, using a sample of 1195 firm-level observations from 2006 to 2018. The dependent variable is the dummy variable indicating firms with at least one military director on the board in year t (Connection). Columns 1-2 display the probit model results using the full sample. Columns 3-4 indicate the probit model based on the propensity score matching. The industry dummies are omitted due to concerns of multicorrelation and data overlapping. Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

Dependent variable	(1) Probit-Industry	(2) Probit-Sector	(3) PSM-Industry	(4) PSM-Sector
Constant	-8.297*	-7.282*	-2.331***	-3.839***
	(4.37)	(4.08)	(0.79)	(1.32)
NoRegulated_Industry	0.702		-0.077	
	(0.49)		(0.11)	
NoRegulated_Sector		-0.421		0.339***
		(0.38)		(0.12)
Size	0.213	0.183	0.073	0.135*
	(0.26)	(0.24)	(0.05)	(0.08)
ROA	0.02)	0.02)	0.00)	0.01)
	(0.02)	(0.02)	(0.01)	(0.01)
Leverage	0.475**	0.462**	0.146**	0.251***
	(0.19)	(0.19)	(0.06)	(0.06)
Growth	0.002	0.002	0.002*	0
	0.00)	0.00)	0.00)	0.00)
GovStatus	0.227	0.233	0.071	-0.03
	(0.22)	(0.22)	(0.09)	(0.11)
No. of Obs.	1195	1195	1192	1193
Chi-square test	13.25	14.03	15	25.88
p-value	0.039	0.029	0.020	0.000
Pseudo R2	0.037	0.036	0.016	0.032

We run additional tests using propensity score matching to confirm the robustness of our result. The dataset is categorized by industry regulation, with companies that do not fall under regulated industries/sectors assigned to the treatment group. We use propensity score matching to find a comparable counterpart for each firm in the treatment group, taking into account five firm characteristics (which are also the

control variables in the probit model). As such, our treatment and control companies are essentially identical with respect to observable characteristics; the only difference is whether or not industry regulation exists. The result of our panel regression with propensity score matching is presented in Columns 3 and 4 of Table 3.8. The results in Column 3 are consistent with our probit model in Column 1, which further verified the robustness of our initial results. In addition, the probit model using propensity score matching on sector regulation reveals that firms in the nonregulated sectors are more likely to appoint military directors on board (significant at one percent level with P-value = 0.005). This result does not support our original Hypothesis 3.1.

To examine the validity of Hypothesis 3.3, we employ a probit model with random effect to assess whether industry concentration positively predicts the likelihood of firms having military directors on their boards. This study uses the Herfindahl-Hirschman index as a proxy for industry competitiveness and the four-firm concentration ratio (*CR4*) as the robustness check. The findings are presented in the second and third columns of Table 3.6. Firstly, consistent with our hypothesis, we find a statistically significant positive association between industry concentration and the probability of appointing military directors to the board (p-value=0.048 for *Concentration* and p-value=0.012 for *CR4*). Secondly, the significance of the Industrial, Resource, and Service sectors further supports Hypothesis 3.1, given the intense government regulation within these industries. Thirdly, our results reveal that firms are more inclined to appoint military directors to the board when they have higher leverage. As An additional robustness check, we perform a different test by excluding industry dummies, and the results, presented in columns two and three of Appendix 1, are consistent with our original findings.

To further investigate the reliability of the results, I perform the regression with *Military_Percent*, which is the percentage of military directors over the entire board, to measure the board's military affiliation, and I check to see if the above conclusions are still valid. Presented in Appendix 2 are the findings of our random effects panel regression. The results are very similar to what we have in the Table 3.6 for the hypothesis 3.1. On the contrary, the relationship between product market concentration and *Military_Percent* is insignificant. However, this result is not entirely

surprising. As we can see from the descriptive statistics in Table 3.4, only a few companies have more than one military director on their board.

3.5.2 Abnormal Returns Around Military Director Appointments

Table 3.8 shows the average abnormal return (AAR) and cumulative average abnormal return (CAAR) of all military director appointments during our sampling period. Eighty-one times SET100 constituent companies appointed military directors from 2006 to 2018. The number is relatively low because I exclude the reelection of existing military directors, as many military directors, once elected, usually stay a long time. Table 3.9 suggests that, on average, there is no unusual stock price movement when a new military director's appointment is announced, neither before nor after the official announcement.

Due to the small sample size, I divided the sample into two categories: firms with government-related businesses, which include companies with government-related business transactions, concessions, and equity ownership, and firms that did not appear to have an apparent connection to the government. The goal is to determine whether there are any differences in how the market reacts to the appointment of a military director across various business types. The result is presented in Table 3.10.

Table 3.9Average and cumulative average daily abnormal return for all new military director appointments

This table presents the average and cumulative average daily abnormal return of military director appointments throughout a 60-day event window following the appointment's official announcement (day 0). AAR and CAAR were calculated based on the formula illustrated in Section 3.4.4. The symbols *, **, and *** indicate values substantially different from zero at 10%, 5%, and 1% significance levels. Note: Due to events such as mergers and acquisitions, some equities do not have closing prices on specific event days. Therefore, the number of appointments on different event days varies.

	No of Appointment	AAR	Std.Dev	t-statistics	CAAR	Std.Dev	t-statistics
-30	79	-0.026%	0.150%	-1.526	-0.503%	4.648%	-0.962
-25	79	-0.024%	0.148%	-1.469	-0.391%	3.953%	-0.880
-20	79	-0.019%	0.158%	-1.042	-0.286%	3.262%	-0.781

Table 3.9 Average and cumulative average daily abnormal return for all new military director appointments (cont.)

	No of Appointment	AAR	Std.Dev	t-statistics	CAAR	Std.Dev	t-statistics
-15	80	-0.014%	0.159%	-0.808	-0.203%	2.508%	-0.725
-10	81	-0.011%	0.156%	-0.653	-0.149%	1.750%	-0.768
-9	81	-0.010%	0.157%	-0.555	-0.138%	1.598%	-0.778
-8	81	-0.008%	0.157%	-0.468	-0.128%	1.444%	-0.800
-7	81	-0.009%	0.163%	-0.508	-0.120%	1.290%	-0.839
-6	81	-0.012%	0.164%	-0.673	-0.111%	1.131%	-0.884
-5	81	-0.015%	0.165%	-0.827	-0.099%	0.970%	-0.917
-4	81	-0.017%	0.166%	-0.941	-0.084%	0.807%	-0.932
-3	81	-0.015%	0.165%	-0.806	-0.066%	0.643%	-0.926
-2	81	-0.018%	0.166%	-0.960	-0.051%	0.480%	-0.964
-1	81	-0.016%	0.163%	-0.900	-0.034%	0.317%	-0.958
0	81	-0.017%	0.159%	-0.984	-0.017%	0.157%	-0.996
1	81	-0.010%	0.163%	-0.550	-0.027%	0.317%	-0.776
2	81	-0.011%	0.169%	-0.574	-0.038%	0.484%	-0.708
3	81	-0.007%	0.169%	-0.373	-0.045%	0.652%	-0.622
4	81	-0.007%	0.169%	-0.348	-0.052%	0.820%	-0.567
5	81	-0.007%	0.166%	-0.373	-0.059%	0.984%	-0.535
6	81	-0.007%	0.164%	-0.368	-0.065%	1.147%	-0.512
7	81	-0.003%	0.166%	-0.176	-0.068%	1.310%	-0.470
8	81	-0.006%	0.168%	-0.317	-0.074%	1.476%	-0.454
9	81	-0.009%	0.168%	-0.477	-0.083%	1.642%	-0.457
10	81	-0.010%	0.166%	-0.527	-0.093%	1.804%	-0.464
15	81	-0.011%	0.163%	-0.627	-0.143%	2.602%	-0.494
20	81	-0.013%	0.159%	-0.728	-0.197%	3.373%	-0.524
25	81	-0.017%	0.154%	-1.016	-0.285%	4.104%	-0.624
30	81	-0.017%	0.153%	-0.972	-0.368%	4.824%	-0.687

Table 3.10 Three-day Cumulative abnormal return by type of firms

	Government Related Firm		Competitiveness	
Descriptive Statistics	Yes	No	Yes	No
No of Observation	69	12	28	53
Mean	-0.091%	0.230%	-0.509%	-0.040%
Median	-0.089%	0.183%		
Std.Dev	0.055%	0.151%	0.577%	0.422%

Table 3.10 Three-day Cumulative abnormal return by type of firms (cont.)

	Government Related Firm		Competitiveness	
Descriptive Statistics	Yes	No	Yes	No
		Test Result		
Two Sample T-test	2.2038**		-0.0991	
Wilcoxon rank-sum test	1.781**		0.377	

This table summarizes the three-day cumulative abnormal return (CAR3) around the official announcement of a new military director appointment. CAR calculation is detailed in Section 3.4.4. For the Government Related Firms, 'Yes" indicates the firm has a certain government affiliation, and "No" otherwise. For Competitiveness, "Yes" means the firm operates in a competitive industry, and "No" means otherwise. The symbols *, **, and *** indicate significance at the 10%, 5%, and 1% levels.

I employed a one-sample t-test to examine whether there was a positive three-day cumulative abnormal return following the official announcement of the military director appointment. The t-test result suggests that the market reaction to the military director appointment does not differ significantly from zero. Next, I conducted a two-tailed t-test to compare the mean scores of the three-day cumulative abnormal return around the official announcement of the military director appointment between two types of firms: those with government affiliation and those without. The findings reveal a statistically significant difference between the two groups (p-value=0.003). The effect size, measured by Cohen's d, was 0.69, signifying a moderate difference between the groups. Specifically, when firms without apparent government affiliation appoint a new military director, the market reacts favorably.

In contrast, when firms with government affiliation make such appointments, the market reacts negatively. The Wilcoxon rank-sum test supports the result, producing a similar outcome (p-value=0.0374). However, the result contradicts Hypothesis 3.2, as I anticipated that the market would respond more positively to appointments of military

directors by government-related firms. Hence, the findings do not lend support to Hypothesis 3.2.

To determine whether the market's response to the appointment of a military director differs depending on the competitive environment in which the firm operates, I further divided the sample according to each sector's competitiveness. In the SET100 sample, the HHI index has a median value of 1650.257. Firms are, therefore, deemed to be operating in a more concentrated industry if their HHI index is greater than or equal to 1650.257 and in a more competitive industry if their HHI index is less than or equal to 1650.257. Table 3.9 presents the outcome, comparing the three-day cumulative abnormal return around the official announcement of the military director appointment using the two-tailed t-test and the Wilcoxon rank-sum test. The insignificant results indicate that the market does not react differently when firms in more and less competitive environments appoint new military directors. I also took an additional test using the 4-firm concentration ratio (*CR4*), and the result remained insignificant.

Next, I conduct a multiple linear regression analysis to test Hypothesis 3.5. Due to the limited sample size, I excluded the industry dummies from the model. Moreover, to serve as a robust check, I also conduct the regression analysis for a seven-day event window around the official announcement of the military director's appointment. The results are presented in Table 3.11.

Column 1 shows the multiple linear regression results for the relationship between firms with government affiliation and three-day cumulative average abnormal returns. The overall model was marginally statistically significant ($F(9,26) = 2.14$, p-value=0.068). The beta coefficient for government firms was -0.121 (SE=0.1570, p-value=0.447), suggesting a slightly negative relationship between government firms and CAR3, but it did not reach statistical significance. The seven-day cumulative abnormal return result presented in column 4 further confirms the result.

The results from columns 2-3 and 5-6 suggest that the market response to military director appointments is negative when firms operate in highly concentrated industries. I adopt both HHI and CR4 to measure product market competitiveness for the robustness of the result, and both measures yield similar findings. I also checked for potential multicollinearity problems and presented the VIF output in column 2 of Appendix 3. The results indicate that our models are free from multicollinearity issues.

Table 3.10 and Table 3.11 demonstrate a degree of agreement in their findings regarding companies with government connections. Both tables imply that firms with government affiliation experience lower cumulative abnormal returns around the military director's appointment compared to other firms, although the result presented in Table 3.11 is insignificant. However, Table 3.11 does report a noteworthy negative correlation between product market concentration and cumulative abnormal return, which conflicts with the outcome reported in Table 3.10. This inconsistency in the findings may be attributed to the limited size of our sample.

Table 3.11 Cross-Sectional Regression for Cumulative Abnormal Return

This table presents the ordinary least squares (OLS) estimation results using a sample of 81 military director appointments in Thailand SET100 listed companies from 2006 to 2018. The dependent variable is the three-day cumulative abnormal return (CAR3) and seven-day cumulative abnormal return (CAR7) around the official announcement of the military director's appointment. Robust standard errors are applied in all specifications. The standard error of the variables is shown in brackets. The symbols *, **, and *** indicate values substantially different from zero at 10%, 5%, and 1% significance levels.

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variable	CAR3	CAR3	CAR3	CAR7	CAR7	CAR7
Constant	1.289*	1.477**	2.182***	3.315*	3.692**	5.339***
	(0.710)	(0.660)	(0.770)	(1.770)	(1.610)	(1.890)
Govfirm	-0.121			-0.204		
	(0.160)			(0.390)		
Concentration		-0.092*			-0.227*	
		(0.050)			(0.120)	
CR4			-1.431**			-3.360**
			(0.520)			(1.250)
Size	-0.062	-0.065*	-0.059	-0.166	-0.165*	-0.152*
	(0.040)	(0.040)	(0.040)	(0.100)	(0.090)	(0.090)
ROA	0.008	0.011	0.014	0.021	0.029	0.035
	(0.020)	(0.020)	(0.020)	(0.040)	(0.040)	(0.040)
Leverage	-0.08	-0.108	-0.108	-0.176	-0.245	-0.242
	(0.090)	(0.090)	(0.090)	(0.200)	(0.210)	(0.210)
Growth	-0.000*	-0.000**	-0.000*	-0.001	-0.001*	-0.001*
	0.000	0.000	0.000	0.000	0.000	0.000
BooktoMarket	0.053	0.069	0.124	0.122	0.165	0.293
	(0.140)	(0.130)	(0.130)	(0.320)	(0.290)	(0.300)
Block	-0.035	-0.062	-0.117	-0.06	-0.135	-0.257
	(0.250)	(0.250)	(0.290)	(0.590)	(0.610)	(0.700)

Table 3.11 Cross-Sectional Regression for Cumulative Abnormal Return (cont.)

Dependent variable	(1) CAR3	(2) CAR3	(3) CAR3	(4) CAR7	(5) CAR7	(6) CAR7
GovStatus	-0.01	-0.012	-0.034	-0.025	-0.029	-0.08
	(0.150)	(0.150)	(0.130)	(0.350)	(0.350)	(0.310)
No. of Obs.	81	81	81	81	81	81
Adjusted R-Squared	0.157	0.178	0.193	0.156	0.182	0.194
F-test	2.14*	2.27*	2.50**	2.07*	2.24*	2.44**
p-value	0.068	0.054	0.037	0.077	0.057	0.041

3.6 Conclusions and Further Research

This research aims to investigate the response of firms and the capital market in Thailand following the emergence of military directors during a period of political instability caused by the exile of former prime minister Thaksin Shinawatra. The study will examine the actions firms took in the wake of this upheaval by appointing military directors and the stock market's response to new military director appointments by investors. By analyzing these responses, this research seeks to gain a deeper understanding of the effects of political turmoil on Thailand's business environment (its governance) and financial markets. Thailand's political system has traditionally been characterized by a three-pillar structure in which power is balanced among the civilian government, the military, and the monarchy (Chambers & Waitoolkiat, 2016). However, the stability of this structure was shaken by the military coup of 2006, which had significant implications for corporations operating within the country. This event necessitated a need for firms to adapt to the changing political landscape and its impact on the business environment, as evidenced in the descriptive statistics in Table 3.4 regarding the change in the military directors' presence as time passed.

It is worth noting that military directors are relatively uncommon in the corporate world globally, and previous studies on political directors have primarily focused on former government officials (An, Duan, Hou, & Liu, 2020). However, in countries such as Thailand, where the military holds significant political influence and governmental power, the emergence of military directors in the corporate sector presents unique business challenges and opportunities. Therefore, research on this topic is critical

to understanding the impact of political power structures on corporate governance and the potential risks and benefits associated with military directors serving on corporate boards. This study aims to address this gap in the literature and provide insights into the implications of military director appointments for firms and their stakeholders in Thailand.

The results of our probit model reveal a significant positive relationship between firms with government-related business transactions and having military directors on board using propensity score matching. On the contrary, firms with government ownership are less likely to have a military director on board in Thailand. In addition, the three-day cumulative abnormal return surrounding the military director's appointment of government-related firms is significantly lower than those without such affiliation, suggesting that the capital market does not necessarily view such affiliation in a favorable way.

Industry concentration, however, is positively associated with a firm's likelihood of having a military director on its board of directors in Table 3.6. In line with our hypothesis, we found that firms in concentrated industries are more likely to have military directors. A possible explanation is that they can utilize the political influence of the military director to secure preferential treatment or access to resources, such as contracts, licenses, or regulatory exemptions. This can help to insulate the business from rivalry and create barriers to entry for potential competitors. However, the difference in the market reaction to a new military director's appointment is insignificant when comparing two groups of firms operating in different competitive environments in Table 3.10.

Moreover, firms operating in concentrated industries yield significant negative three-day cumulative abnormal returns surrounding the announcement of new military director appointments. The tiny sample size, with only 81 new military director appointments over a 13-year span, may contribute to the conflicting evidence, making it difficult to control for and distinguish all firm characteristics. Further, once elected, most military directors in Thailand typically hold their board positions for a long time, so the incremental news in a new appointment may be limited.

One noteworthy finding of this study, as evidenced by the descriptive statistics presented in Table 3.4, elucidates the proclivity of listed companies in Thailand

to enlist military personnel as board directors during periods characterized by military rule. This phenomenon suggests that Thai businesses are adaptive and able to cope with changes in the local socio-political environment. Such findings contribute to the academic discourse surrounding corporate governance and organizational behavior, shedding light on the nuanced dynamics between businesses and the operating environment within a specific context.

The data reported in this study support the broad assertion that Thai military directors differ from conventional political directors described in earlier work. Military regimes commonly encounter substantial resistance and adverse scrutiny from the media, raising concerns over civil liberties, democratic principles, and the potential for human rights violations. Corporations must thus carefully evaluate the necessity of appointing a military director to their boards, especially if the firms already have established government affiliations. However, the absence of a significant adverse market reaction when Thai firms appoint new military directors suggests that these appointments may not be widely perceived as severely detrimental to firm governance. This observation raises the possibility that the advantages, such as government connections, and disadvantages, such as a potential lack of business experience, associated with military directors may offset each other. It is plausible that the perceived benefits of these appointments, such as access to government resources and networks, may be considered valuable by corporations, thus mitigating concerns about the directors' limited business expertise. However, further research is needed to delve into the intricate dynamics and underlying factors that contribute to the perceived equilibrium between the potential advantages and disadvantages of appointing military directors in the emerging market context.

Further research may explore the following areas related to military director appointments. Firstly, this study only covers the SET100 listed companies. A broader sample covering the entire SET index might offer valuable insights and provide more observations for military director appointments. The second area may be to look deeper into the existing board structure before the military director's appointment. A military director might not bring much value to a company that already has a board of directors with political affiliations.

On the other hand, military directors might offer vital advantages to businesses that lack obvious government resources. Within the context of the prevailing military junta governance since the 2019 general election, the third research area encompasses an investigation into the military regime spanning the period from 2019 to 2022. As the military assumes the role of government again, the prominence of military directors assumes heightened significance, exerting more direct and tangible impacts on the functioning of the civilian government. Therefore, the negative relationship we documented here might differ as circumstances change.

Lastly, it is also interesting to look at how the firm could benefit from its military director appointment during the crisis. The Covid pandemic, ranging from 2020 to 2022, might serve as a good testing ground to examine the value of having a military director on board, particularly in areas such as lower cost of borrowing, better access to government aid, and better access to external finance.

CHAPTER IV
POLITICAL CONNECTIONS, INTERNAL CORPORATE GOVERNANCE, AND FIRM PERFORMANCE

4.1 Introduction

This research project aims to test if appointing military directors as independent directors in Thailand leads to weaker monitoring and more deficient firm corporate governance. As the resource dependence theory suggests, military directors can benefit firms by providing better access to government resources. However, due to military directors' lack of business expertise, their presence on the board may also signal weak and symbolic internal governance. Below, we briefly sketch the theoretical foundations leading to the research questions.

Business and government coalitions are standard practices in both developing and developed countries. Pfeffer and Salancik (1978) propose the resource dependence theory (RDT) to explain this international phenomenon. They perceive political connections as a vital resource for the firm but yet hard to acquire internally. Thus, RDT scholars attribute the popularity of corporate political activities (CPAs) to the valuable resources government relationships can bring to the business (Hillman et al., 2004; Hillman, Withers, & Collins, 2009). The empirical evidence also signifies that political connections benefit corporations, such as preferential credit, access to government contracts, or a higher chance of a bailout (Blau et al., 2013; Chen, Shen, & Lin, 2014; Witko, 2011). This relationship is more pronounced for firms in emerging markets with relatively weaker institutional settings and higher corruption (Faccio, 2010).

Similarly, a substantial number of studies also indicate that corporate governance, derived from agency theory (Jensen & Meckling, 1976), besteads firms in areas like productivity, performance, valuation, or transparency (Erhardt, Werbel, & Shrader, 2003; Klein, 2002a; Tian & Twite, 2011). However, the function of corporate governance differs between developed and developing countries. External governance

mechanisms, such as the takeover market or legal protection of minority shareholders, play an essential role in developed markets due to their stronger institutional environment. Given the effective external governance mechanisms in developed markets, robust internal governance mechanisms may matter less (Klapper & Love, 2004). In a developed market setting, there may be fewer side effects if the board of directors focuses more on its resource provision than its monitoring role (Hillman & Dalziel, 2003).

However, in emerging markets, weak legal enforcement, concentrated ownership, and cronyism all dent the effectiveness of external governance mechanisms (Johnson & Mitton, 2003). Therefore, internal governance, such as the board of directors, is relied upon to play a more active role in monitoring managers' misconduct and balance the interests between minority shareholders and block holders (Aggarwal, Erel, Stulz, & Williamson, 2008; Dahya, Dimitrov, & McConnell, 2008; Klapper & Love, 2004)

These two theoretical frameworks (RDT and agency theory) are not necessarily mutually exclusive. Firms can have both robust political ties and a sound corporate governance system. However, it is interesting to know whether there is a substitution effect when they conflict, particularly in an environment where strong internal corporate governance is essential. To address this research question, we will look at the impact of appointing military personnel on Thai corporate boards. Besides their apparent political connections, those military directors generally have relatively weak industrial knowledge and business insight, as well as limited expertise and incentives to monitor the firm's major shareholders and management. More importantly, they are often elected as independent directors, which may weaken internal governance (Neville et al., 2019). Therefore, appointing those military directors to the board represents a conflict between RDT and agency theory. This conflict leads to the following main research question: Does appointing military directors as independent directors lead to weaker monitoring and more deficient firm corporate governance, all else equal?

We will investigate this question in two ways. First, we will test whether the expected positive relation between board independence and performance is weakened when military directors are appointed as independent directors. Further, we will test if

the negative effect of appointing military directors is stronger in industries that depend less on government contracts and regulations and in less competitive industries. Empirical studies suggest that industries with fewer government contracts receive less direct benefits of political connections, so the agency problems of military directors then weigh stronger. Similarly, firms in uncompetitive industries require better internal corporate governance than competitive industries with high pressure to perform (Giroud & Mueller, 2011; Goldman et al., 2013; Lawton et al., 2013), making the appointment of military directors in uncompetitive industries more problematic.

Second, we will investigate the impact of military directors on earnings management, another sign of poor firm corporate governance. We will test if appointing military directors as independent directors leads to more severe earning management problems, all else equal. The three questions addressed will be: does the earning quality drop when the firm appoints (current or former) military personnel as independent directors? Is earning quality worse when a military director sits on the audit committee? Does the earning management choice differ for politically connected firms?

4.2 Contribution to the Literature

This research makes three main contributions to the literature. Firstly, prior studies on corporate governance often yield contradictory results in a different testing environment. Following the earlier studies (Kang & Zhang, 2018), I hypothesize that the mixed results might partially follow from the symbolic adaptation of corporate governance practices (Cohen, Krishnamoorthy, & Wright, 2008, 2010). For example, some independent directors might be biased and not perform their monitoring duties due to their social ties with the CEO (Bruynseels & Cardinaels, 2014; Hwang & Kim, 2009). Therefore, instead of using proper board structure or other governance procedures as a vehicle to accomplish better monitoring of management, those firms might symbolically adopt the recommended corporate governance practices just to meet the regulatory requirements.

Thailand provides an excellent testing ground since military directors in Thailand are often appointed to the board as independent directors and frequently sit on the audit committee. Firms appointing those military directors perhaps demand their

resource provision role rather than a monitoring role (Hillman & Dalziel, 2003), which can weaken internal governance. This study can complement prior research on independent directors and audit committee structure and provide additional evidence on the symbolic adaptation of good corporate governance practices.

Secondly, evidence on the role and impact of political connections and military directors is mainly limited to the United States, where the institutional setting is different from emerging markets (Faccio, 2006). Our study complements the existing literature using data from Thailand, an emerging market. More importantly, direct military participation is not unique to Thailand. Countries like Pakistan, Malaysia, Indonesia, and Laos PDR have all undergone military government periods. Thus, the results will provide valuable insights for countries in similar situations.

Finally, our study might shed some light on analyzing the earnings management choices of politically connected firms. Prior studies suggest that politically connected firms tend to choose more conspicuous real earnings management methods even though such practices have negative long-term consequences for the firm (Braam, Nandy, Weitzel, & Lodh, 2015). This study will investigate whether Thai firms with military directors on their boards also adopt potentially more harmful real earnings management.

4.3 Theoretical Framework and Hypothesis Development

4.3.1 Internal Governance Effectiveness and Firm Performance

Corporate governance mechanisms function both externally and internally. However, external governance mechanisms, such as the market for corporate control and legal enforcement, are less likely to perform effectively in an emerging market setting (Klapper & Love, 2004; La Porta et al., 1999). On the other hand, internal mechanisms, such as board independence and separation of the CEO and board chair, might be more effective in disciplining self-interested managers and balancing the power between controlling owners and minority shareholders (Anderson & Reeb, 2004).

Agency theorists outline three essential internal governance mechanisms: block holders, managerial incentive contracts, and corporate boards (Jensen & Meckling,

1976; Shleifer & Vishny, 1986). Block holders are an essential element of internal governance as institutions and individuals who control a large percentage of ownership of the firm are both capable and incentivized to monitor the executives (Aggarwal, Erel, Ferreira, & Matos, 2011; Agrawal & Mandelker, 1990; Shleifer & Vishny, 1986). Further, block holders' monitoring incentive is more potent when there is less divergence between their cash flow and voting rights (Claessens, Djankov, Fan, & Lang, 2002; Lins, 2003).

The Thai capital market is dominated by family firms, in which the combined family ownership often represents the single largest shareholding (Claessens et al., 2000). Family firms are different from other types of organizations, as they frequently fall into the category of family-owned and family-run. This situation might hamper the monitoring function of block holders (Barth, Gulbrandsen, & Schønea, 2005; Wiwattanakantang, 2001).

Moreover, the family-owned and family-run also means that top executives, often family members, are less likely to make arduous efforts to improve firm performance through innovation, internationalization, and mergers & acquisitions but instead strive to keep the longevity of the family enterprise and legacy (Gomez-Mejia, Cruz, Berrone, & De Castro, 2011; Gómez-Mejía et al., 2007). In other words, incentive contracts might also fail to function for family firm managers.

Besides block holders, the corporate board is also a critical tool for internal governance because the board of directors is obligated to monitor top executives and help set the firm's overall strategic goals (Jensen & Meckling, 1976). Board monitoring is essential due to the possibility of managers pursuing self-interests at the cost of the shareholders. Effective board monitoring could reduce agency costs and enhance firm performance (Fama & Jensen, 1983b). Two essential aspects of effective board monitoring are CEO duality and board independence.

Regulators and agency theorists often suggest separating the CEO and board chair roles. From the agency theory perspective, the board of directors is obligated to ensure that the CEO carries out his duties in a way that serves the best interest of shareholders. Thus, boards can be seen as monitoring devices that help align CEO and shareholder interests. CEO duality empowers the CEO but simultaneously hampers the board's ability to effectively monitor and discipline (Davidson, Jiraporn, Kim, & Nemec,

2004; Rechner & Dalton, 1991) and is detrimental to firm performance (Bhagat & Bolton, 2008).

Board independence is also typically seen as a form of good governance. Agency scholars argue that affiliation with the current CEO/organization impedes the objectivity of such directors on monitoring (Neville et al., 2019). More importantly, boards dominated by outside, non-affiliated directors are thought to be better monitors because they are more likely to side with shareholders and protect their interests when they deviate from management's interest (Hillman & Dalziel, 2003). Thus, appointing independent directors, especially non-affiliated directors, improves the company's market valuation (Millstein & MacAvoy, 1998; Rosenstein & Wyatt, 1990).

Consistent with this view, prior research suggests that boards with a higher fraction of outside directors are more effective at mitigating agency problems and, thus, beneficial for the focal firm (Anderson et al., 2004; Farber, 2005; Klein, 2002a; Liang, Xu, & Jiraporn, 2013; Liu et al., 2015). For example, Liu et al. (2015) discovered that firms with more independent directors outperform their peers with better operating performance in China. And Chancharat, Detthamrong, and Chancharat (2019) also document a similar result in Thailand. Moreover, independent directors are particularly crucial to the governance of family firms as independent directors' presence balances the family influence and provides better monitoring of management and controlling owners (Anderson & Reeb, 2004).

Nevertheless, a few studies question the benefits of board independence (Boivie, Bednar, Aguilera, & Andrus, 2016; Hwang & Kim, 2009; Leung, Richardson, & Jaggi, 2014). Boivie et al. (2016) state that board monitoring is hard to quantify. It is unrealistic to automatically assume a board full of independent directors is better at monitoring as several barriers prevent the board from adequate supervision. More importantly, directors have to be both capable and motivated to perform their monitoring duties, and those two do not substitute for each other. Instead, they are required to be both present to achieve effective monitoring (Hambrick, Misangyi, & Park, 2015).

Leung et al. (2014) also discovered that the effectiveness of board independence is contingent on firm characteristics. They found no relationship between board independence and firm performance among family firms in Hong Kong. Still, they documented a positive relationship among non-family firms, revealing that

ownership concentration impacts the board monitoring function (Desender, Aguilera, Crespi, & GarcÍa-cestona, 2013). Besides, Dalton et al. (1998) conducted a meta-analysis and found a weak to no relationship between board independence and firm performance. From a different angle, Hwang and Kim (2009) argue that even though some independent directors appear unrelated to the CEO or firm by conventional means, they may still maintain strong social ties. Thus, those so-called "grey" independent directors cannot properly perform their designated monitoring function (Clifford & Evans, 1997).

Hence, it is crucial to distinguish firms that merely adopt good internal governance symbolically from the firms that do not. The appointment of independent military directors can be one strong signal of symbolic good governance. Another form of symbolic good governance could be appointing a "grey" director who is independent only in name but practically connected to the managers/owners. The independent directors often fulfil an important monitoring role. However, similar educational and work backgrounds, as well as the social ties might lead the independent directors to accept management views. The efficiency of independent directors' intended monitoring role may be hampered by this kind of symbolic adaption of corporate governance practices.

As another example, the conventional definition of CEO duality might fail to function as a proxy for internal governance in markets with concentrated ownership despite its strong theoretical basis and broad support from regulators worldwide. Given that more than 50% of Thai listed companies are family-controlled (Claessens et al., 2000), some family firms can have a board chairperson and CEO from the same family. We thus define that a firm is genuinely free from the CEO duality problem when the CEO and Chairman do not share the same kin. Similarly, we expect that there will be some independent directors who are conventionally independent but socially connected with controlling families or top executives. Thus, only those conventionally and socially independent directors can perform their monitoring roles and serve the best interests of shareholders. Further on, in Section 4.4.3 and 4.4.4, we develop two proxies for CEO-duality and board independence that exclude such "grey" cases where ties with the manager-owners may exist. Given these proxies for internal governance, we formulate

the following hypothesis as a baseline expectation for the effect of internal governance on firm performance:

Hypothesis 4.1: there is a positive relationship between firm internal governance level and firm performance in Thailand.

4.3.2 The moderating influence of industry competitiveness

Prior literature also suggests that corporate governance is more relevant for firms facing less competition (Giroud & Mueller, 2010, 2011). As industry-level competition functions as an external governance mechanism for the firm and can help prevent management slack, it can act as a substitute for internal governance mechanisms (Tian & Twite, 2011). We expect that internal governance, as measured by CEO duality and board independence, has a more significant impact on firm performance when product market competition is low.

Hypothesis 4.2: Industry competitiveness negatively moderates the positive relationship between internal governance mechanisms and firm performance in Thailand.

4.3.3 Political Connections and Firm Governance

Prior literature generally documents a positive association between political connections and firm valuation (Faccio, 2006; Goldman et al., 2009; Wong & Hooy, 2018), particularly in highly regulated industries (Hillman, 2005; Houston & Ferris, 2015). Apart from seeking to influence government regulations, firms can also benefit from political directors when pursuing government contracts (Goldman et al., 2013), bank loans (Houston et al., 2014; Khwaja & Mian, 2005), international expansion (Yarbrough Jr et al., 2017), and better IPO performance (Bao, Johan, & Kutsuna, 2016; Li, Wu, Ye, & Zeng, 2018).

However, whether firms benefit from their political connections in terms of operating performance is less evident in the literature. On the one hand, political ties serve as a conduit of information and help to tunnel valuable government resources to the firm (Hillman et al., 2004). Also, appointing a political director on the corporate board improves the political legitimacy of the firm (Davidson III & Worrell, 2001), which might translate into government recognition and endorsement (Sheng, Zhou, &

Li, 2011). From this perspective, political directors might enhance firm performance. For example, Joni, Ahmed, and Hamilton (2020) find that Indonesian firms tend to have a higher Tobin's Q when they have director with a political connection on their board of directors or supervisory board. Similarly, compared with firms without apparent military connections, corporations with military ties in Thailand have higher market performance but lower accounting performance and higher risk levels (Jaroenjitrkam & Maneenop, 2022).

On the other hand, political connections at the board level might bring more damage than good for the firm if not managed well (Chen et al., 2017). For example, Arayakarnkul et al. (2022) suggest that Thai-listed firms with military connections tend to overly compensate their board of directors, supporting the agency perspective. Also, Kang and Zhang (2018) find that firms with political directors have lower merger announcement returns and more unsatisfactory operating performance when the firm has few government-related business transactions or is under loose regulation. This finding suggests that political directors fail to monitor the management well and might simply rubber-stamp the CEO's decisions in those situations. In addition, Boubakri, Cosset, and Saffar (2008) compiled a sample of 245 newly privatized firms across 41 countries (14 developed countries and 27 developing countries) and found that firms with political directors exhibit relatively poor operating performance. Moreover, Ling et al. (2016) investigated listed real estate firms in China and found that those politically connected firms exhibit a lower return on assets. They partially attribute such an inverse relationship to the connected firms' overinvestment behaviors.

Consistent with this rubber-stamping view, we expect Thai firms with independent military directors to display a weaker relationship between internal governance and firm performance. The reason is two-fold. First, when military directors are present on the corporate board, they are more likely to be monitors in name only (symbolic) due to a lack of relevant business expertise. Further, many Thai firms only employ three independent directors as required by SET, which means the actual number of effective independent directors may be reduced with the appointment of a military director. Second, those military directors might rather rubber stamp the CEO's decisions, as suggested by Kang and Zhang (2018), thus allowing management or controlling owners' entrenchment.

Hypothesis 4.3: The presence of a military director negatively moderates the relationship between internal governance and firm performance.

As the resource dependence theory suggests, political connections can also positively affect performance, but mainly for firms that depend directly on the government due to regulations, concessions, or sales transactions. For example, Tang, Zeng, Pang, and Huang (2022) found that firms connected with RTA have significantly higher Tobin's Q following the military coup in 2014. Similarly, Suriyapongprapai et al. (2022) also suggest that military ties benefit firms in Thailand through direct military affiliation by appointing military directors or indirect military affiliation by training with the National Defense College of Thailand.

Hypothesis 4.4: The presence of a military director has a direct positive effect on firm performance only when a firm is under heavy government regulation, or when it depends on a license or concession from the government to operate, or when it does business transactions with the government.

4.3.4 Audit Committee Effectiveness and Financial Misconduct

Another sign of weak corporate governance is that it is often associated with reduced information disclosure (Eng & Mak, 2003), more severe earnings management (Harymawan & Nowland, 2016; Xie et al., 2003), and a higher probability of restatements and fraud (Abbott, Parker, & Peters, 2004). Those financial statement-related issues also highlight the importance of the audit committee, given its responsibility for both the internal auditing process and external auditor selection (Abbott & Parker, 2000). The quality of financial reports is essential for the integrity of the capital market, as investors rely on the information presented in those financial statements to make their investment decisions. Therefore, inadequate disclosure hampers investors' motivation for participation.

Though the relationship between corporate governance and financial reporting quality is theoretically sound, which actors or mechanisms play an essential role is less evident in the literature (Cohen, Krishnamoorthy, & Wright, 2004). Take internal governance mechanisms as an example. Scholars and regulators generally agree that a well-governed board should be independent of management influence. However, what classifies as independent is debatable and has been repeatedly examined in

different periods and institutional settings in the literature. According to the recent meta-analysis by Neville et al. (2019), board independence can be clustered into three levels: board independence, audit committee independence, and CEO–chair separation.

Even though the audit committee is the primary unit within the board for financial statement-related issues, it is still a subset of the corporate board. More importantly, the composition of the audit committee is jointly determined by the board as a whole. Therefore, a well-functioning board is a prerequisite for a competent audit committee (Klein, 2002b). Prior studies suggest that board independence is associated with a smaller likelihood of financial fraud (Beasley, 1996), lower accrual earnings (Davidson, Goodwin-Stewart, & Kent, 2005; Klein, 2002a), and a higher chance of appointing reputable external auditors (Beasley & Petroni, 2001). However, the relation between board independence and financial reporting quality may also depend on firm-level characteristics such as ownership concentration (Park & Shin, 2004), the type of earnings management measure used (Peasnell, Pope, & Young, 2005), and country-level institutional settings (Neville et al., 2019).

Apart from board independence, regulators and agency scholars often strongly recommend the audit committee's independence. The audit committee is directly obligated to ensure the quality of financial statements. And an audit committee composed of independent directors is often associated with better earning quality (Abbott, Park, & Parker, 2000). Thus an independent audit committee is more beneficial than an independent board (Neville et al., 2019). On top of that, regulators also suggest that financial expertise is essential for committee members to perform their monitoring roles (SOX Act, 2002; CAQ, 2016). Although regulators and scholars often argue about what type of financial expertise (finance, accounting, supervisory, or mixed) is more effective for monitoring financial reporting quality (Davidson, Xie, & Xu, 2004; Dhaliwal, Naiker, & Navissi, 2010; Krishnan & Visvanathan, 2008), it is less ambiguous that financial expertise matters (Chen & Komal, 2018; Lin & Hwang, 2010).

4.3.5 Political Connections and Financial Misconduct

Politically connected firms (PCN firms) often benefit from their coalition with government officials in terms of improved operations, finance, and valuation (Hillman, 2005; Yeh, Shu, & Chiu, 2013). However, as political benefits are not costless, PCN firms also have to cater to the interests of their political affiliations as a *quid pro quo* (Micco, Panizza, & Yanez, 2007). Some of those practices, though contentious, are legally acceptable and under government oversight. Others might be more informal and potentially illegal. For example, in the United States, campaign donations and PAC contributions are lawful corporate strategies, often rewarded with more government contracts (Goldman et al., 2013; Witko, 2011) and a higher valuation when the affiliated politician or party wins the election (Cooper et al., 2010; Goldman et al., 2009).

Other than those campaign contributions, PCN firms often have to serve the financial interests of their affiliated politician to preserve their relationship (Bliss & Gul, 2012). This phenomenon is more severe in emerging economies, characterized by weak legal settings and higher levels of corruption (Faccio, 2010). More importantly, neither party intends to reveal their exchange to the public, thus motivating PCN firms to window-dress their financial statement to cover up the benefits transfer. For example, using audit fees as a proxy for the auditor's effort, Gul (2006) suggests that politically connected firms are perceived as riskier during the financial crisis, and external auditors request higher audit fees. The audit fee was reduced substantially afterward. Also, Chaney et al. (2011) suggest that earning quality is weaker for PCN firms as PCN firms can afford the consequence of poor disclosure quality because they have better access to debt financing compared with non-connected firms (Tee, 2018). Besides, PCN firms might engage in rent-seeking through related party transactions (RPT) due to their complexity in nature and simplicity for cash extraction (Djankov et al., 2008). Habib, Muhammadi, and Jiang (2017) found that firms in Indonesia with related party loans and guarantees are less likely to appoint prominent audit firms. This relationship is more robust for PCN firms. The result suggests that PCN firms utilize RPT as an earning management tool to tunnel benefits toward their political connections.

We expect this inverse relationship between earnings quality and political connection holds for military directors in Thailand as well. Our reasons are three-fold. First, given the strong military influence on the government in Thailand in the sample

period 2006-2019, Thai military directors play a more crucial political role compared to other countries, which means they share some similarities with political directors and can function as resource providers. Secondly, they might be more likely to be poor monitors from the agency perspective as they lack sufficient business expertise and industry know-how to detect any managerial misconduct. Third, they might be independent following the SET definition but more likely to be associated with the firm's top executives or controlling shareholders through social ties.

This inverse relationship might even be more robust when the military directors sit on the audit committee of Thai-listed firms. As regulators and agency scholars suggested, the audit committee should be dominated by independent directors, preferably with financial and accounting expertise. Military directors, on the other hand, might lack both independence and competence. Therefore, their presence might dent the monitoring functions of the audit committee and thus have a more direct negative impact on earning quality.

Hypothesis 4.5: Firms with military directors have more inferior earnings quality.

Hypothesis 4.6: Firms with military directors sitting on the audit committee have more inferior earnings quality.

4.3.6 Earning Management Choice

Corporate executives, if they choose to do so (and often they do), can engage in earnings management to avoid reporting unfavorable financial results (Graham, Harvey, & Rajgopal, 2005). They might be, on the one hand, afraid of the impact of faithful (but unfavorable) disclosure on the stock price and the subsequential negative effect on firm credibility and their wealth (Burgstahler & Dichev, 1997), and on the other hand, rewarded by beating market expectations from their stock ownership and compensation package (Myers, Myers, & Skinner, 2007). Prior studies indicate that, within the boundary span of GAAP and legal frameworks, there are two types of earning management choices (Gunny, 2010; Jensen, 2005): Accrual-based Earnings Management (AEM) and Real Earnings Management (REM).

AEM is achieved by changing the bookkeeping methods or underlying assumptions used when reporting transactions in the financial statement (Braam et al.,

2015). Managers can alter the depreciation schedule or doubtful account estimates to purposely lift the reported earnings in a certain period (Zang, 2012). To some extent, those practices are less harmful as they have no impact on cash flows and do not change the underlying operations (Gunny, 2010), thus having fewer long-term consequences. On the contrary, REM alters the firm's cash flow by purposefully deviating from regular operating practices (Badertscher, 2011). Managers can engage in price discounts, deter research and development spending, or adjust advertising spending to achieve better financial performance (Cheng, 2004; Cohen, Mashruwala, & Zach, 2010; Graham et al., 2005). However, those practices often yield adverse long-term consequences (Roychowdhury, 2006).

Historically, accruals management has drawn more significant attention (Fields, Lys, & Vincent, 2001; Zang, 2012), but its usage declined significantly in the United States after the passage of SOX (Cohen, Dey, & Lys, 2008). The hefty SOX regulation strengthens the legal enforcement of corporate insiders and thus functions as an external governance mechanism to mitigate AEM (Francis, Hasan, & Li, 2016). REM, however, exhibits the opposite pattern, increasing when regulations tighten, and firms' discretionary accruals choice receives more external scrutiny (Graham et al., 2005). This switch of the earnings management method is not surprising since REM, though more costly, is more challenging to detect than AEM (Braam et al., 2015).

Politically connected firms are more likely to engage in earnings management because managers in those firms are obligated to satisfy the political and financial interests of their political affiliates in exchange for political favors (Claessens et al., 2008; Faccio, 2006; Faccio, Masulis, & McConnell, 2006; Witko, 2011). Besides, managers need to cover up the exchange due to the associated reputational risk for both parties. Earnings management serves those purposes. The vast majority of the early literature documents an inverse relationship between political connections and earnings quality (Chaney et al., 2011; Gross, Königsgruber, Pantzalis, & Perotti, 2016). Scholars often conjecture that politically connected firms can afford a more inferior quality of disclosure because they face less financing pressure (Boubakri, Guedhami, Mishra, & Saffar, 2012; Houston et al., 2014).

However, those studies only use discretionary accruals to proxy for earnings quality and ignore the prevalence of real earnings management following the passage of

SOX (Cohen et al., 2008; Graham et al., 2005). Braam et al. (2015) argue that politically connected firms might engage in more real earnings management since REM is less likely to alert external auditors and regulators. Firms with political connections might utilize real earnings management to hide the exchange between the company and its political affiliates since they both are eager to conceal any less lawful transactions. In line with this idea, Ding, Li, and Wu (2018) find that politically connected private firms use more real earnings management in China. Similarly, in Thailand, we expect firms with military directors to use REM more often, all else equal, to mask *quid-quo-pros* transactions with their political connections. And, for firms where a military director cannot provide many resources (e.g., lightly regulated firms), we expect more REM, as in such firms, military directors are likely to have a rubber-stamping role, implying weaker internal governance.

Hypothesis 4.7: firms with military directors will conduct more real earnings management

4.4 Methodology and Data

4.4.1 Data Collection

This study will use firm-level data for non-financial companies listed in the Stock Exchange of Thailand from 2006 to 2019. The period covers the most recent two coup d'états due to their intrinsic similarity (Baker, 2016). We collect data from several sources. Equity ownership, members of the board of directors, frequency of board meetings, independent external auditor, and years of incorporation are obtained directly from the Stock Exchange of Thailand. We also use the SET SMART database to identify the nomination dates of the military directors. However, some nomination information is not readily available, so hand collection through cross-reference with the firm annual report is necessary. We will match the nomination data with fundamental, accounting, and stock price data from DataStream.

4.4.2 Methodology

We will use a panel regression model methodology to analyze the data and test the hypotheses. The regression equation for Hypothesis 4.1 is the following:

$$\begin{aligned} PER_{i,t} = \beta_0 &+ \beta_1 CG_{i,t-1} + \beta_2 BoardMeet_{i,t-1} \\ &+ \beta_3 BoardSize_{i,t-1} + \beta_4 Control_{i,t-1} + \beta_5 Family_{i,t-1} \\ &+ \beta_6 Gov_{i,t-1} + \beta_7 Size_{i,t-1} + \beta_8 Leverage_{i,t-1} \\ &+ \beta_9 Slack_{i,t-1} \\ &+ \beta_{10} PPE_{i,t-1} + \beta_{11} Loss_{i,t-1} + \beta_{12} Growth_{i,t-1} \\ &+ \beta_{13} GovStatus_t + \sum \gamma\, IndustryDummy + \varepsilon_{i,t} \end{aligned}$$

Where *i* symbols listed firms, *j* symbols industries based on SET Industry Group and Sector classification structure, and *t* symbols years. $PER_{i,t}$ is the dependent variable indicating firm performance by the end of the calendar year. Following prior literature (Ling et al., 2016; Wong & Hooy, 2018), we use Return on Asset (ROA) and Tobin's Q as the primary measures and Return on Equity (ROE) as the robustness check to measure the performance of the Thai listed firms. For the firm's internal governance level (*CG*), the metric of board independence (*BoardInd*) is employed, defined as the ratio of independent directors who lack any discernible social or economic ties with the CEO to the size of the board. The detailed definition of *BoardInd* is addressed in Section 4.4.3. Additionally, the absence of CEO duality issue is considered through a binary variable (*NoDuality*). A value of 1 is assigned if the firm's chairman does not share any social or economic relationship with the CEO and 0 otherwise. A more detailed definition of *NoDuality* is in Section 4.4.4. These two indicators serve as a proxy for sound internal corporate governance practices at the firm level.

We also adopt the following set of control variables from prior studies (Brick & Chidambaran, 2010; Ding et al., 2018; Wiwattanakantang, 2001; Wong & Hooy, 2018). *BoardMeet* is the total number of board meetings conducted during the year. *BoardSize* is the total number of directors on the board. *Control* is a dummy variable equal to one if the firm has at least one controlling owner (family control, government control, or foreign Control) holding more than 25 percent of the firm's share directly or indirectly and zero otherwise. We also include two subset dummy variables, *Family* and *Gov*, to control for ownership type. *Family* equals one if the firm is family-

controlled (holding more than 25 percent of the firm's shares directly or indirectly and zero otherwise) and zero otherwise. *Gov* equals one if the firm is government-controlled (holding more than 25 percent of the firm's shares directly or indirectly and zero otherwise) and zero otherwise. Although according to Naknoi (2020), The Royal Thai Army can also be seen as a business group as they, directly and indirectly, control several companies in Thailand and provide non-security services to civilian citizens. The RTA does not directly own any firms in our full sample. *Size* is the natural logarithm of total assets. *Leverage* is the financial leverage ratio. *Slack* is cash scaled by total assets, and *PPE* is the property, plant, and equipment scaled by total assets. *Loss* is the dummy variable equal to one if the firm reported a loss and zero otherwise. *Growth* is the growth rate of sales.

GovStatus is a binary variable equal to one if Thailand is under a military government in year *t* and zero if Thailand is under a civilian government in year *t*. Prior studies often suggest that military rule indicates higher political risk and is associated with capital flight (Gozgor et al., 2017; Le & Zak, 2006). Those direct impacts of the military regime might affect firm performance and demand more corporate attention. I thus classify Thailand as under a military government if the head of the state is a current or former general of RTA and is under a civilian government otherwise. And *IndustryDummy* is a set of dummies indicating the industry firm *i* belong to base on the SET standards.

To test Hypothesis 4.2, 4.3, and 4.4, the regression equation is the following.

$$\begin{aligned} PER_{i,t} = {} & \beta_0 + \beta_1 CG_{i,t-1} + \beta_2 Concentration_{i,j,t-1} \\ & + \beta_3 Concentration_{i,j,t-1} * CG_{i,t-1} + \beta_4 Military_{i,t-1} \\ & + \beta_5 Military_{i,t-1} * CG_{i,t-1} + \beta_6 BoardMeet_{i,t-1} \\ & + \beta_7 BoardSize_{i,t-1} + \beta_8 Control_{i,t-1} + \beta_9 Family_{i,t-1} \\ & + \beta_{10} Gov_{i,t-1} + \beta_{11} Size_{i,t-1} + \beta_{12} Leverage_{i,t-1} \\ & + \beta_{13} Slack_{i,t-1} \\ & + \beta_{14} PPE_{i,t-1} + \beta_{15} Loss_{i,t-1} + \beta_{16} Growth_{i,t-1} \\ & + \beta_{17} GovStatus_t + \beta_{18} Military\_Percent_{i,t-1} \\ & + \sum \gamma \, IndustryDummy + \varepsilon_{i,t} \end{aligned}$$

Where *Concentration* indicates industry concentration. *Military* is a dummy variable equal to one if the focal firm has a current or formal employee (general) of the Royal Thai Army on the board at time *t* and zero otherwise. Notably, some companies are affiliated with prominent military figures in Thailand by having their spouses or relatives serving on the board instead of the generals. This might be an attempt to cover up their presence or because the company wants to build connections with generals still serving on the RTA. I will regard those representatives of military personnel as military directors and include them in the measure of the military director. I also control the special cases where some companies recruit more than one military director into the board to intensify their relationship with the military government by proposing an additional variable *Military_Percent*, which is the total number of military directors divided by the board size.

To test hypothesis 4.5 and 4.6, the regression equation is the following:

$$\begin{aligned} EM_{i,t} = \beta_0 &+ \beta_1 Military_{i,t-1} + \beta_2 MilitaryAC_{i,t-1} \\ &+ \beta_3 BooktoMarket_{i,t-1} + \beta_4 Loss_{i,t-1} + \beta_5 ROA_{i,t-1} \\ &+ \beta_6 Size_{i,t-1} + \beta_7 Leverage_{i,t-1} \\ &+ \beta_8 Growth_{i,t-1} + \beta_9 FF_{i,t-1} + \beta_{10} GovStatus_t \\ &+ \beta_{11} Military\_Percent_{i,t-1} + \varepsilon_{i,t} \end{aligned}$$

Where *EM* is the proxy for earnings management, there are two types: The first type is real earnings management (REM). Prior literature often measures the REM using abnormal operating cash flow ($DISC\_CFO_{i,t}$), abnormal production costs ($DISC\_PROD_{i,t}$), and abnormal discretionary expenses ($DISC\_EXP_{i,t}$) (Roychowdhury, 2006). The second type is accrual-based earnings management (AEM). There are two commonly adopted measurements of accrual-based earnings management, the linear model proposed by Dechow, Sloan, and Sweeney (1995) and the nonlinear model adopted by Ball and Shivakumar (2006) and Wang (2006), an extension of Dechow and Dichev (2002)'s model.

MilitaryAC is a dummy variable equal to one if a military director sits on the firm's audit committee and zero otherwise. We also control for firm characteristics previously shown to influence earning quality (Martin, Campbell, & Gomez-Mejia, 2016; Wang, 2006). *BooktoMarket* is the Book-to-Market ratio of the firm. *Loss* is the dummy variable that equals one if the firm reported a loss and zero otherwise. *ROA*

measures firm performance using return to assets. *Size* is the natural logarithm of total assets. *Leverage* is the financial leverage ratio. *Growth* is the growth rate of sales. *FF* is the proxy for the family firm. Following prior studies, we adopt two measurements for the family firm (Achleitner, Günther, Kaserer, & Siciliano, 2014; Anderson & Reeb, 2003; Martin et al., 2016; Wang, 2006). Family ownership (*FF_Own*) quantifies the cumulative ownership percentage attributed to family members. *FF_Dummy* is a binary variable that takes a value of 1 if family members are present on the board of directors and/or hold top executive positions within the firm or possess at least 25% of the voting rights. It takes a value of 0 if none of these conditions are met. These measures indicate the extent of family involvement in the firm's ownership and leadership, serving as a proxy for the influence and control exerted by the family in corporate decision-making.

To test hypothesis 4.7, the regression equation is the following:

$$\begin{aligned} REM_{i,t} = {} & \beta_0 + \beta_1 Military_{i,t-1} + \beta_2 FF_{i,t-1} + \beta_3 BooktoMarket_{i,t-1} \\ & + \beta_4 Loss_{i,t-1} + \beta_5 ROA_{i,t-1} + \beta_6 Size_{i,t-1} \\ & + \beta_7 Leverage_{i,t-1} \\ & + \beta_8 Growth_{i,t-1} + \beta_9 GovStatus_t \\ & + \beta_{10} Military\_Percent_{i,t-1} + \varepsilon_{i,t} \end{aligned}$$

Where *REM* is the proxy for real earnings management, and it consists of three measurements: abnormal operating cash flow ($DISC\_CFO_{i,t}$), abnormal production costs ($DISC\_PROD_{i,t}$), and abnormal discretionary expenses ($DISC\_EXP_{i,t}$).

4.4.3 Measurement of Board Independence

Agency theorists and regulators often put great emphasis on board independence as an independent board is more willing to voice out the concerns on behalf of minority shareholders and less likely to side with the controlling shareholders and CEO (Abbott et al., 2000; Klein, 2002a). However, prior studies on board independence often fail to yield a positive impact on firm performance or valuation (Boivie et al., 2016; Dalton et al., 1998). Hambrick et al. (2015) suggest that board members must simultaneously meet four criteria (independent, expertise in that domain, bandwidth, and motivation) to be capable monitors. This proposition challenges the traditional measure of board independence proposed by agency theorists and regulators and raises the bar for director qualifications. Similarly, Hwang and Kim (2009) argue

that even some independent directors that appear unrelated to the CEO or firm by conventional means may still maintain strong social ties.

We believe that board independence matters for the corporate governance of the firm. Nevertheless, the measurement of board independence should be modified to remove apparent social ties and external influence. We thus define a director as Independent if he/she is not only independent by the SET standard but also not a current or former general of the Royal Thai Army, as well as not socially tied to the CEO. We think military directors might lack the ability and motivation to perform their monitoring role, as they are appointed primarily due to their resource provision ability and not because of other expertise. And if the directors belong to the CEO's social network, they are unlikely to vent any opposite opinions (Krishnan, Raman, Yang, & Yu, 2011). We can acquire those social ties data through corporate annual reports, as the Stock Exchange of Thailand mandates the listed firms to disclose the biographical data of board members and top executives. This data includes information such as educational background, past working experience, and current board memberships. Following Krishnan et al. (2011), we identify a social connection between independent directors and CEO using shared educational background, prior working experience, and board membership. Then *BoardInd* is measured by the ratio of non-grey independent directors and board size.

4.4.4 Measurement of CEO Duality

Agency theorists also contend that CEO duality is a double-edged sword that, on the one hand, facilitates unified control over corporate matters, thus helping the CEO make essential decisions promptly. On the other hand, it weakens the board's monitor function (Finkelstein & D'aveni, 1994). Rechner and Dalton (1991) find that firms that separate the CEO and Board chair roles have superior accounting returns. However, many studies fail to find a positive linkage between firms free from the duality problem and their performance (Baliga, Moyer, & Rao, 1996; Donaldson & Davis, 1991). The meta-study by Dalton et al. (1998) further confirms the weak correlation between CEO duality and firm performance.

Despite the lack of evidence on the CEO duality and firm performance relationship, the theoretical foundation for the duality-performance link remains solid

(Dalton et al., 2007). More recent evidence suggests that CEO duality does have some negative implications for firm-level corporate governance (Syriopoulos & Tsatsaronis, 2012; Tuggle, Sirmon, Reutzel, & Bierman, 2010). For example, Tuggle et al. (2010) find that CEO duality hampers the board member's attention to monitoring by analyzing the board meeting transcripts.

In line with Dalton et al. (2007), we believe CEO duality still poses a fundamental threat to the board's monitoring function. However, many of the firms might appear to be free from the CEO duality problem, but the CEO and board chair may still share strong social ties or even come from the same family. Thus, we define the firm as free from the CEO duality problems when the CEO and board chairperson do not share strong social ties, such as being family members or sharing a common educational background or shared working experience. The *NoDuality* is the dummy variable equal to one when the firm is free from the CEO duality problems and zero otherwise.

4.4.5 Measurement of Product Competition

Our primary measure of product competition is the Herfindahl-Hirschman index (HHI). Firms scoring high on the HHI operate in a market with relatively low competition. The HHI is calculated as follows.

$$HHI_{j.t} = \sum_{i=1}^{N_j} s_{i,j,t-1}^2$$

Where the $S_{i,j,t-1}$ is the market share of firm *i* in industry *j* in year *t-1*. We use firms' annual sales as the proxy for market share, as Giroud and Mueller (2010) suggested. The benchmark of HHI is based on the SET Industry Group and Sector classification structure. The detailed distribution of HHI across different industries and sectors can be referred to in Table 3.3.

We also adopt an additional measure of product market competition, the four-firm concentration ratio (CR4), as the robustness check. Since our data relies on only publicly listed firm and exclude private firms, our measurements might paint an unreliable image of the level of concentration in an industry, especially in those where private enterprises are also responsible for a sizable portion of industry sales (Ali, Klasa, & Yeung, 2008). The four-firm concentration ratio assesses the level of market

concentration within a specific industry. It calculates the proportion of the sector's total revenues controlled by the top four companies. A higher CR4 score denotes a more concentrated industry where a few dominating firms control a sizable percentage of the market, potentially affecting market dynamics such as pricing and competition.

4.4.6 Measurement of Real Earnings Management

Prior studies often adopt three measures to proxy a firm's real earnings management (Achleitner et al., 2014; Cohen & Zarowin, 2010; Roychowdhury, 2006): the abnormal levels of cash flow from operations (*ABN_CFO*), discretionary expenses (*ABN_EXP*), and production costs (*ABN_PRO*).

We express the normal levels of cash flow from operations (CFO) using the following ordinary least squares (OLS) model:

$$\frac{CFO_{i,t}}{A_{i,t-1}} = \alpha_0 + \alpha_1\left(\frac{1}{A_{i,t-1}}\right) + \alpha_2\left(\frac{S_{i,t}}{A_{i,t-1}}\right) + \alpha_3\left(\frac{\Delta S_{i,t}}{A_{i,t-1}}\right) + \varepsilon_{i,t}$$

Where $A_{i,t-1}$ is the total assets for firm *i* at *t–1*; $S_{i,t}$ is the sales for firm *i* at time *t*; ΔS_t is the difference in sales at *t* and *t-1*. The regression model is estimated in each SET Industry Group/Sector Classification and requires at least 15 observations in each industry regression (Achleitner et al., 2014). The abnormal level of cash flow from operation (*ABN_CFO*) equals to actual CFO minus the normal level of CFO calculated based on the equation. And more negative *ABN_CFO* indicates more earnings-increasing REM.

We estimate the normal levels of discretionary expenses using the following OLS estimation for each industry year with a minimum of 15 observations:

$$\frac{DISX_{i,t}}{A_{i,t-1}} = \alpha_0 + \alpha_1\left(\frac{1}{A_{i,t-1}}\right) + \alpha_2\left(\frac{S_{i,t-1}}{A_{i,t-1}}\right) + \varepsilon_{i,t}$$

Where $DISX_{i,t}$ is the discretionary expenses for firm *i* at time *t*; $A_{i,t-1}$ is the total assets for firm *i* at *t–1*; $S_{i,t-1}$ is the sales for firm *i* at time *t-1*.

The abnormal level of discretionary expense (*ABN_EXP*) is computed as the difference between the actual values and the normal levels predicted from the equation above. And a more negative value of *ABN_EXP* indicates more earnings-increasing REM.

Like the model for *ABN_CFO*, we estimate the normal level of production costs using the following OLS estimation:

$$\frac{PROD_{i,t}}{A_{i,t-1}} = \alpha_0 + \alpha_1\left(\frac{1}{A_{i,t-1}}\right) + \alpha_2\left(\frac{S_{i,t}}{A_{i,t-1}}\right) + \alpha_3\left(\frac{\Delta S_{i,t}}{A_{i,t-1}}\right) + \alpha_4\left(\frac{\Delta S_{i,t-1}}{A_{i,t-1}}\right) + \varepsilon_{i,t}$$

Where $PROD_{i,t}$ is defined as the production cost for firm *i* at time *t*, measured as the sum of the cost of goods sold ($COGS_{i,t}$) and the change in inventory level ($\Delta INV_{i,t}$); $\Delta S_{i,t-1}$ is the change in sales from *t-2* to *t-1*.

The abnormal level of production costs (*ABN_PRO*) is set equal to the actual production cost (PROD) minus the normal level of PROD measured by the equation above. And a more substantial value of *ABN_PRO* implies more earnings-increasing REM.

4.4.7 Measurement of Accrual-Based Earnings Management

We adopt two popular measures of discretionary accruals from the literature. The first one is a linear model proposed by Dechow et al. (1995), which is a modification based on the original model proposed by Jones (1991). Based on the modified Jones model, we first calculate the total accruals of the firm. Following the prior studies (Dechow et al., 1995; Jones, 1991), we calculate the total accruals of the firm use the following model:

$$TA_{i,t} = \left(\Delta CA_{i,t} - \Delta CL_{i,t} - \Delta Cash_{i,t} + \Delta STD_{i,t} - DEP_{i,t}\right)/A_{i,t-1}$$

Where $\Delta CA_{i,t}$ is the change in current assets for firm *i* at time *t*; $\Delta CL_{i,t}$ is the change in current liabilities for firm *i* at time *t*; $\Delta Cash_{i,t}$ is the change in cash and cash equivalents; $\Delta STD_{i,t}$ is the change in short-term debt; $DEP_{i,t}$ is depreciation and amortization expenses.

With the total accruals on hand, we can estimate the firm parameters using the following model:

$$TA_{i,t} = \alpha_1\left(1/A_{i,t-1}\right) + \alpha_2\left(\Delta REV_{i,t} - \Delta REC_{i,t}\right) + \alpha_3\left(PPE_{i,t}\right) + \varepsilon_{i,t}$$

Where $\alpha_1, \alpha_2, \alpha_3$ denote the OLS estimates of $\alpha_1, \alpha_2, \alpha_3$, and $TA_{i,t}$ is the total accruals scaled by $A_{i,t-1}$. with α_1 , α_2, α_3 , we can then estimate the nondiscretionary accruals (NDA) first. The formula is the following:

$$NDA_{i,t} = \alpha_1(1/A_{i,t-1}) + \alpha_2(\Delta REV_{i,t} - \Delta REC_{i,t}) + \alpha_3(PPE_{i,t})$$

Where ΔREV_t is the difference between revenues for firm *i* in year *t* and *t-1*, scaled by $A_{i,t-1}$; $\Delta REC_{i,t}$ is the difference of net receivables for firm *i* in year *t* and *t-1*, scaled by $A_{i,t-1}$; $PPE_{i,t}$ is the gross property plant and equipment for firm *i* in year t, scaled by $A_{i,t-1}$.

Discretionary accruals (DA) are then calculated by subtracting the estimated nondiscretionary accruals (NDA) from the total accruals (TA). Like NDA and TA, DA is scaled by lagged total assets and is calculated as below:

$$DA_{i,t} = TA_{i,t} - NDA_{i,t}$$

Insiders have the power to manipulate operating cash flow, for example by accelerating future revenue reporting or delaying current expense reporting, to conceal economic shocks. They can also underreport good current performance to create reserves for the future (Leuz, Nanda, & Wysocki, 2003). Therefore, I take the absolute value of the discretionary accruals (ABS_DA) to measure the degree of accrual-based earnings management.

The second measure of discretionary accruals is a piecewise nonlinear model proposed by Ball and Shivakumar (2006). Several studies have also adopted this model (Achleitner et al., 2014; Wang, 2006). To estimate our measure of discretionary accruals, we calculate the following equation using OLS regression:

$$ACC_{i,t} = \alpha_0 + \alpha_1 CFO_{i,t-1} + \alpha_2 CFO_{i,t} + \alpha_3 CFO_{i,t+1} + \alpha_4 DCFO_{i,t} + \alpha_5 DCFO_{i,t} * CFO_{i,t} + \varepsilon_{i,t}$$

Where $ACC_{i,t}$ is the total accruals for firm *i* at *t*, defined as earnings before extraordinary items minus operating cash flows, scaled by average total assets at *t*; CFO is the operating cash flow of the firm, scaled by average total assets at *t*; $DCFO_{i,t}$ is a dummy variable equal to one if $CFO_{i,t} - CFO_{i,t-1} < 0$, and zero otherwise; $DCFO_{i,t} * CFO_{i,t}$ is the proxy for economic loss. $ACC_{i,t}$ is estimated in each industry measured SET Industry Group/Sector Classification and requires at least 30 observations in each

industry regression. The error term, ε_t, is expected to capture the unexpected portion of abnormal accruals.

The absolute value of the residuals ($ABS\_ACC_{i,t}$) is the proxy for earnings management. We use the absolute value because firms can engage in accrual-based earnings management to inflate/deflate income for a different purpose (Klein, 2002a; Wang, 2006). A higher value indicates a greater level of earnings management.

4.4.8 Measurement of Family Firms

We adopt two measurements for the family firm following prior studies (Achleitner et al., 2014; Anderson & Reeb, 2003; Wang, 2006): Family ownership stake (*FF_Own*) and a dummy variable (*FF_Dummy*). The dummy is one if family members are on the board and/or serve as the firm's top executives or hold at least 25% of the voting rights, and zero otherwise.

Family ownership is essential to determine whether the firm is family-controlled or not. As the ownership stake increases, controlling families allocate more attention and have a more personal attachment to the firm (Gómez-Mejía et al., 2007). We define family ownership (*FF_Own*) as the total percentage of common stock owned by founding family members at *t*. We adopt an additional measure of the family firm, *FF_Dummy*, because ownership difference may not accurately proxy the level of influence that the family *de facto* exerts on the firm (Anderson & Reeb, 2003).

Table 4.1 presents the definitions of the variables used in this study and their expected signs. *BoardInd* and *NoDuality* measure firm-level corporate governance. The higher percentage of independent directors and clear separation of CEO and Chairman's roles have been widely viewed as a sign of good corporate governance and thus lead to better firm performance. *Concentration* is a moderator variable as a highly concentrated operating environment demands a better internal monitoring mechanism. Therefore, firms operating in those industries rely more on internal governance mechanisms.

Military is a dummy variable indicating the presence of at least one military director on the corporate board. And *MilitaryAC* indicates that the firm has at least one military director sitting on the audit committee. We expect that having a military director on the board harms the board's monitoring mechanism. Therefore, firms with military

directors on the board (especially on the audit committee) might conduct earnings management more severely than firms that do not have such practices.

4.4.9 Sample Distribution and Descriptive Statistics

Table 4.2 presents descriptive statistics for all variables used in the study. Firms were chosen based on their listing in the SET100 index, so any firm occurring in the SET100 in any year from 2006 to 2018 is included in the dataset starting from 2005 (if data is available). Therefore, there is no survivorship bias for the sample period of 2006-2018. Furthermore, companies operating within the financial sector have been omitted from the sample due to the unique regulations that govern them, which significantly impact their financial attributes and make them incomparable to businesses in other sectors (Jiraporn et al., 2006; Papangkorn et al., 2021).

Table 4.1 Definition of Variables and Expected Sign

This table presents the definitions of all variables used in the regression model and event study and the expected sign of each variable for each regression model.

Variable	Definition	Expected Sign Performance	Expected Sign RM	Expected Sign AEM
Dependent variables				
ROA	Ratio of the net income and firm average total asset, winsorized at the 99 percentiles (right tail).			
Tobin's Q	Sum of stock market capitalization and the book value of total debt, divided by the book value of assets.			
Real Earnings Management (RM)				
ABN_CFO	Actual CFO minus the normal level of CFO			
ABN_PRO	Actual production cost minus the normal level of production cost			
ABN_EXP	Actual discretionary expenses minus the normal levels of discretionary expense			
Accrual-based earnings management (AEM)				
ABS_ACC	Absolute value of earnings before extraordinary items minus operating cash flows, scaled by average total asset			
ABS_DA	Absolute value of the difference between total accruals and non-discretionary accruals scaled by the lagged total assets			

Table 4.1 Definition of Variables and Expected Sign (cont.)

Variable	Definition	Expected Sign Performance	Expected Sign RM	Expected Sign AEM
Independent variables				
BoardInd	Number of independent directors divided by the board size	+	-	-
NoDUality	Dummy: 1 for firm i's CEO have no material relationship with the board chairman; 0 otherwise	+	-	-
Concentration	Herfindahl-Hirschman index for the industry/sector at year t, divided by 1000.	+		
CR4	Percentage of total sales of four largest firms to total industry/sector sales at year t.	+		
Military	Dummy: 1 for firm i have military director; 0 Otherwise.		+	+
MilitaryAC	Dmmu: 1 for firm i have military director on the audit committee		+	+
Controls for company characteristics				
BoardSize	Number of directors on the board			
BoardMeet	Number of board meetings conducted during the year			
Control	Dummy:1 for firm has at least one controlling owner holding more than 25% of the firm's equity			
Family	Dummy: 1 for family control and zero otherwise			
Gov	Dummy: 1 for Government control and zero otherwise			
Size	Natural logarithm of total assets			
Leverage	Total debt to equity ratio, winsorized at the 99 percentiles (both tails).			
Slack	Cash scaled by total assets			
PPE	Property, Plant, and equipment scaled by total assets			

Table 4.1 Definition of Variables and Expected Sign (cont.)

Variable	Definition	Expected Sign Performance	Expected Sign RM	Expected Sign AEM
Loss	Dummy: 1 for firm reported loss and zero otherwise.	-	+	+
Growth	Growth rate of sales, winsorized at the 99 percentiles (right tail).	+	+	+
GovStatus	Dummy: 1 for Thailand is under a military government in year t; 0 otherwise	-	+	+
Military_Percent	Number of military directors divided by the board size	-	+	+
FF_Own	Percentage ownership stake of the controlling family		+	+
FF_Dummy	Dummy:1 for firm i have family members on board and/or serve as a top executive, or hold at least 25% of shares; 0 otherwise		+	+
ROA	Ratio of the net income and firm average total asset, winsorized at the 99 percentiles (right tail).		+	+
Booktomarket	Ratio of the book value of equity and market value of equity			

Table 4.2 Descriptive Statistics of the Sample

This table presents descriptive statistics of the sample. This sample consists of 1,407 Thai-listed companies included in the SET100 index. The sample excludes companies lacking Worldscope financial statement data. See Table 4.1 for the definition of all the variables. Panel A displays the descriptive statistics for the variables used in the Performance model. Panel B shows the descriptive statistics for the variables used in the earnings management model. Firms in the financial sectors are late removed when conducting regression analysis.

Panel A: Descriptive Statistics for the Performance Model

Variable	No of Obs	Mean	Median	SD	Min	Max	Skewness	Kurtosis
ROA	1407	6.953	6.450	7.215	-15.450	31.990	0.509	5.482
Tobin's Q	1407	1.655	1.227	1.192	0.000	7.515	2.622	11.132
ROE	1407	12.672	13.690	17.612	-71.470	62.850	-1.404	9.831

Table 4.2 Descriptive Statistics of the Sample (cont.)

Panel A: Descriptive Statistics for the Performance Model

Variable	No of Obs	Mean	Median	SD	Min	Max	Skewness	Kurtosis
BoardInd	1407	0.281	0.286	0.134	0.000	0.778	0.085	3.507
NoDuality	1407	0.460	0.000	0.499	0.000	1.000	0.161	1.026
BoardMeet	1399	9.132	8.000	4.353	3.000	33.000	1.326	5.739
BoardSize	1407	11.506	11.000	2.677	5.000	25.000	0.464	3.183
Concentration	1407	1.968	1.650	1.249	0.437	6.109	1.287	4.597
CR4	1407	0.657	0.702	0.161	0.304	1.000	-0.633	2.699
Military	1407	0.195	0.000	0.396	0.000	1.000	1.542	3.377
GovFirm	1407	0.264	0.000	0.441	0.000	1.000	1.068	2.142
Military_Percent	1407	0.022	0.000	0.050	0.000	0.357	2.665	11.076
Control	1407	0.800	1.000	0.400	0.000	1.000	-1.502	3.257
Family	1407	0.556	1.000	0.497	0.000	1.000	-0.225	1.050
Gov	1407	0.134	0.000	0.341	0.000	1.000	2.145	5.600
Size	1407	17.481	17.264	1.601	13.772	21.882	0.585	3.102
Leverage	1407	1.007	0.734	1.105	0.000	6.430	2.591	11.555
Slack	1406	0.106	0.064	0.120	0.000	0.716	2.064	7.296
PPE	1407	0.335	0.304	0.260	0.000	0.944	0.288	1.848
Loss	1407	0.094	0.000	0.292	0.000	1.000	2.786	8.763
Growth	1398	10.020	7.660	23.592	-47.830	107.040	1.156	6.555
GovStatus	1407	0.542	1.000	0.498	0.000	1.000	-0.170	1.029

Panel B: Descriptive Statistics for the Earnings Management Study

Variable	No of Obs	Mean	Median	SD	Min	Max	Skewness	Kurtosis
ABN_CFO	1194	0.071	0.066	0.146	-0.696	0.951	0.707	7.534
ABN_EXP	1194	0.045	0.030	0.084	-0.340	0.674	1.475	10.628
ABN_PRO	1193	-0.144	-0.123	0.198	-1.262	0.749	-0.670	7.483
ABS_DA	1180	0.098	0.064	0.114	0.000	0.924	2.859	13.842
ABS_ACC	1182	0.057	0.040	0.062	0.000	0.811	4.592	41.819
Military	1197	0.190	0.000	0.392	0.000	1.000	1.583	3.507
Military_Percent	1197	0.022	0.000	0.052	0.000	0.357	2.694	11.163
MilitaryAC	1197	0.087	0.000	0.282	0.000	1.000	2.933	9.605
ROA	1197	8.454	7.840	7.599	-14.210	36.590	0.662	5.884
Booktomarket	1194	0.852	0.655	0.892	-4.668	11.255	3.824	32.639
Loss	1197	0.099	0.000	0.299	0.000	1.000	2.678	8.169
Size	1197	17.231	17.113	1.311	13.772	21.568	0.316	3.069
Leverage	1197	0.902	0.707	0.894	0.000	5.546	2.393	11.232
Growth	1189	9.932	7.910	23.949	-47.830	107.040	1.164	6.498
FF_Dummy	1196	0.767	1.000	0.423	0.000	1.000	-1.261	2.591
FF_Own	1197	0.331	0.339	0.238	0.000	0.979	-0.016	1.892
GovStatus	1197	0.470	0.000	0.499	0.000	1.000	0.119	1.014

4.5 Empirical Results

4.5.1 Corporate Governance and Firm Performance

I first estimate a panel regression model with random effects to test the potential impact of corporate governance mechanisms on firm performance. Random effect models are preferred in this study because many independent variables, such as board size and percentage of military directors on board, are time-invariant and cannot be effectively assessed under the fixed effect model (Bell & Jones, 2015). I report results with robust standard errors to correct potential heteroscedasticity problems. Those adjustments ensure that estimates of statistical significance are reliable, even in the presence of a non-standard error distribution. The results are presented in Table 4.3, with columns one and two displaying the main results, and column three is a robustness check using ROE.

The panel regression analysis results partially support Hypothesis 4.1 as board independence has a positive relationship with Tobin's Q (p-value=0.005). However, CEO duality does not exhibit a substantial impact on firm performance. This result suggests that board independence is an effective internal governance impacting firm performance, whereas CEO nonduality is not (after controlling for board independence). As a robustness check to further confirm our findings, we reran the panel regression without controlling for industry type, as shown in Appendix 4. The results agree with those listed in Table 4.3. We also diagnose collinearity to determine whether our sample has multicollinearity problems. The findings, which are presented in column 1 of Appendix 5, show that our model is devoid of such issues.

In line with prior studies (Aggarwal et al., 2011; Agrawal & Mandelker, 1990; Shleifer & Vishny, 1986). we also find that having a controlling block holder in Thailand improves firms' accounting performance. Blockholders have more incentive and power to monitor and discipline the top executives. Therefore, they are more likely to be associated with better accounting performance, as indicated by the significant positive relationship with ROE (p-value=0.023).

Our panel regression model yields an intriguing finding: *GovStatus* consistently has a negative relation with our three measures of ROA (p-value=0.006), Tobin's Q (p-value=0.026), and ROE (p-value=0.004). The findings indicate that

periods of military government have adverse effects on economic conditions, normal company operations, or capital market valuation, potentially implying a negative relationship between the military government and these factors. The findings point to a possible inverse relationship between military rule and the aforementioned performance indicators. However, it is imperative to consider the contextual backdrop that preceded the military coups in Thailand during our sample period, which involved political turmoil and significant public demonstrations. It's conceivable that the unrest before the military intervention could have, on its own, produced substantial harm to the Thai economy and corporate sector. Consequently, disentangling the distinct effects of the pre-coup turmoil from those attributable to the subsequent military government poses a significant challenge.

Table 4.3 Internal Governance Effectiveness and Firm Performance

This table presents the estimation results for Hypothesis 4.1, using a sample of 1197 firm-level observations from 2006 to 2018. Firms in the consumer product industry are merged with those in the service industry, as there are only four companies in the consumer product industry for the entire sample period. Technology Industry is omitted as default. The dependent variables are Return on Assets (ROA), Tobin's Q, and Return on Equity (ROE). Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

	(1)	(2)	(3)
Dependent variables	ROA	Tobin's Q	ROE
Constant	21.488***	1.947**	12.639
	(5.240)	(0.910)	(13.390)
BoardInd	0.149	1.064***	-4.855
	(1.930)	(0.380)	(4.530)
NoDuality	-0.333	-0.174*	0.423
	(0.680)	(0.100)	(1.310)
BoardMeet	-0.049	-0.017	-0.217
	(0.060)	(0.010)	(0.160)
BoardSize	0.184	-0.024	0.758**
	(0.110)	(0.020)	(0.300)

Table 4.3 Internal Governance Effectiveness and Firm Performance (cont.)

	(1)	(2)	(3)
Dependent variables	ROA	Tobin's Q	ROE
Control	1.879	-0.023	6.865**
	(1.270)	(0.200)	(3.020)
Family	0.655	0.282	-1.066
	(1.050)	(0.200)	(2.640)
Gov	-0.346	-0.038	-8.250**
	(1.390)	(0.190)	(4.050)
Size	-1.047***	-0.038	-0.414
	(0.330)	(0.050)	(0.770)
Leverage	-0.567**	-0.025	-2.163
	(0.250)	(0.040)	(1.450)
Slack	15.560***	3.823***	18.350*
	(5.420)	(0.950)	(10.060)
PPE	3.391**	0.114	5.851*
	(1.530)	(0.270)	(3.430)
Loss	-3.471***	-0.162***	-10.165***
	(1.000)	(0.060)	(2.730)
Growth	0.023***	0.001	0.080***
	(0.010)	0.000	(0.020)
GovStatus	-1.008***	-0.147**	-2.396***
	(0.370)	(0.070)	(0.840)
Agro & Food	-1.415	0.466	-4.462
	(1.590)	(0.340)	(3.430)
Industrials	-5.021***	-0.523**	-12.378***
	(1.620)	(0.210)	(3.990)
Property & Construction	-1.595	-0.132	-2.917
	(1.490)	(0.230)	(3.500)
Resources	-2.623	-0.103	-5.456
	(1.600)	(0.220)	(4.200)
Service	-2.047	0.634**	-4.885
	(1.490)	(0.270)	(3.450)
No. of Obs.	1197	1197	1197
Chi-square test	90.63	79.57	89.73
p-value	0.000	0.000	0.000
R-square	0.217	0.266	0.213

4.5.2 The moderating influence of industry competitiveness

To understand whether industry competitiveness serves as an external disciplining mechanism for firms, we adopt the additional variable *Concentration* as a moderator in our model. *Concentration* measures industry concentration using the HHI index, and firms scoring high on the HHI index are generally perceived as operating in a concentrated (less competitive) industry. In addition, we adopt *CR4*, the four-firm concentration ratio, as the robustness check for industry competitiveness. A higher *CR4* indicates market concentration and a lower *CR4* often suggests that the product market is reasonably competitive. We hypothesize that firms operating in a concentrated industry lack external threats and thus need internal governance mechanisms to monitor and discipline the executives. Whereas firms operating in competitive industries face more external pressure, and their executives are less likely to conduct rent-seeking activities. Therefore, internal governance mechanisms might be more critical for the firm in a concentrated industry, and their potential benefits may only materialize in those firms.

The results presented in Table 4.4 partially support our Hypothesis 4.2. Columns 1-3 use *Concentration* as the indication for market concentration, and Columns 4-6 use *CR4* as the indication for market concentration. The interaction effect between *BoardInd* and *Concentration* is positive and marginally statistically significant when using ROE as the firm performance measurement (p-value=0.067; one-sided = p-value 0.034). The interaction effect between *BoardInd* and *CR4* significantly positively impacts firm performance, as measured by ROA (p-value=0.024) and ROE (p-value=0.014). Those results suggest that board independence positively affects firm performance when the industry becomes more concentrated.

Table 4.4 presents the estimation results for Hypothesis 4.2, using a sample of 1197 firm-level observations from 2006 to 2018. Firms in the consumer product industry are merged with those in the service industry, as there are only four companies in the consumer product industry for the entire sample period. Technology Industry is omitted as default. The dependent variables are Return on Assets (ROA), Tobin's Q, and Return on Equity (ROE). Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *,**, and ***, respectively.

Table 4.4 Internal Governance Effectiveness and Firm Performance

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variables	ROA	Tobin's Q	ROE	ROA	Tobin's Q	ROE
Constant	22.621***	1.879**	16.225	22.591***	2.354***	19.642
	(5.27)	(0.91)	(13.66)	(5.16)	(0.91)	(14.04)
BoardInd	-5.352	1.071	-20.226**	-17.481**	-0.155	-50.209**
	(4.42)	(0.75)	(10.09)	(8.25)	(1.47)	(19.68)
NoDuality	0.188	-0.163	2.738	0.518	-0.122	2.9
	(1.40)	(0.21)	(2.58)	(2.60)	(0.39)	(4.91)
Concentration	-0.209	0.066	-1.069			
	(0.62)	(0.08)	(1.28)			
CR4				-1.505	-0.57	-9.879
				(4.44)	(0.71)	(9.61)
BoardInd*Concentration	2.629	-0.01	7.263*			
	-1.8	-0.25	(3.96)			
NoDuality*Concentration	-0.201	-0.003	-1.001			
	-0.44	-0.07	(0.86)			
BoardInd*CR4				26.620**	1.827	68.242**
				(11.79)	(2.11)	(27.66)
NoDuality*CR4				-1.126	-0.072	-3.327
				(3.40)	(0.49)	(6.71)
BoardMeet	-0.041	-0.016	-0.2	-0.04	-0.017	-0.203
	(0.06)	(0.01)	(0.16)	(0.06)	(0.01)	(0.16)
BoardSize	0.165	-0.025	0.715**	0.156	-0.024	0.703**
	(0.12)	(0.02)	(0.30)	(0.12)	(0.02)	(0.30)
Control	1.986	-0.023	7.120**	1.927	-0.015	7.019**
	(1.28)	(0.20)	(3.05)	(1.29)	(0.20)	(3.10)
Family	0.551	0.279	-1.235	0.585	0.279	-1.254
	(1.06)	(0.19)	(2.67)	(1.08)	(0.20)	(2.71)
Gov	-0.364	-0.056	-8.184**	-0.397	-0.025	-8.268**
	(1.41)	(0.19)	(4.10)	(1.40)	(0.19)	(4.06)
Size	-1.096***	-0.041	-0.514	-1.082***	-0.04	-0.492
	(0.33)	(0.06)	(0.79)	(0.33)	(0.05)	(0.78)
Leverage	-0.530**	-0.025	-2.087	-0.512**	-0.023	-2.028
	(0.25)	(0.04)	(1.46)	(0.25)	(0.04)	(1.46)
Slack	15.594***	3.811***	18.693*	15.453***	3.829***	18.253*
	(5.42)	(0.94)	(10.12)	(5.42)	(0.95)	(10.07)
PPE	3.144**	0.084	5.584	2.973**	0.124	5.28
	(1.51)	(0.27)	(3.43)	(1.47)	(0.27)	(3.45)

Table 4.4 Internal Governance Effectiveness and Firm Performance (cont.)

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variables	ROA	Tobin's Q	ROE	ROA	Tobin's Q	ROE
Loss	-3.511***	-0.161***	-10.357***	-3.440***	-0.165***	-10.240***
	(0.99)	(0.06)	(2.73)	(0.97)	(0.06)	(2.70)
Growth	0.023***	0.001	0.080***	0.023***	0.001	0.081***
	(0.01)	0.00	(0.02)	(0.01)	0.00	(0.02)
GovStatus	-0.960**	-0.137**	-2.370***	-0.916**	-0.147**	-2.259***
	(0.38)	(0.07)	(0.87)	(0.39)	(0.06)	(0.87)
	(1.58)	(0.21)	(3.84)	(1.58)	(0.21)	(3.83)
Agro & Food	-1.401	0.443	-4.379	-0.908	0.471	-3.54
	(1.60)	(0.35)	(3.45)	(1.56)	(0.34)	(3.39)
Industrials	-4.582***	-0.484**	-11.732***	-4.133***	-0.525**	-10.896***
	(1.58)	(0.21)	(3.84)	(1.58)	(0.21)	(3.83)
Property & Construction	-1.078	-0.098	-1.932	0.119	-0.133	-0.107
	(1.53)	(0.24)	(3.56)	(1.75)	(0.26)	(3.80)
Resources	-2.697*	-0.137	-5.314	-2.24	-0.094	-4.68
	(1.63)	(0.23)	(4.23)	(1.61)	(0.22)	(4.25)
Service	-1.633	0.665**	-4.184	-1.409	0.640**	-3.725
	(1.50)	(0.27)	(3.44)	(1.47)	(0.26)	(3.40)
No. of Obs.	1197	1197	1197	1197	1197	1197
Chi-square test	100.87	82.17	97.3	114.26	84.18	97.55
p-value	0.00	0.00	0.00	0.00	0.00	0.00
R-square	0.222	0.273	0.218	0.213	0.264	0.207

Due to the inclusion of two similar interaction effects in our model, multicollinearity is a potential concern. To address this issue, we conducted a collinearity diagnosis, and the Variance Inflation Factor (VIF) values are presented in column 2 of Appendix 5. Specifically, the interaction effect between *BoardInd* and *Concentration* exhibits a VIF of 11.28, indicating a potential problem. As a result, we re-ran the panel regression by excluding the interaction effect of *NoDuality*Concentration*. This decision was based on the finding from Table 4.3, which suggests that *NoDuality* is not an effective internal governance mechanism. Appendix 6 displays the results of the updated regression. Column 3 of Appendix 5 provides the collinearity diagnostic on the updated model. The analysis outcomes from

Appendix 6 consist of the results presented in Table 4.4 and do not indicate any evidence of multicollinearity concerns.

To better interpret the results, the variables *BoardInd*, *Concentration,* and *CR4* were standardized to facilitate meaningful comparisons. Subsequently, a panel regression was conducted, and the findings were presented in Appendix 7. The regression results, utilizing standardized coefficients, revealed that the interaction effect has a standardized coefficient of 1.123 with a p-value of 0.090 when we use *Concentration* as the indication for market competition and ROE as firm performance. The result suggests that, after controlling for other variables in the model, a one standard deviation increase in the industry concentration level changes the standardized beta of *BoardInd* by +1.123, while that beta is -0.547 for firms with average industry concentration. We then perform an additional robustness check with CR4 as the indication for market competition and ROE as firm performance. The result suggests that, after controlling for other variables in the model, a one standard deviation increase in the industry concentration level changes the standardized beta of *BoardInd* by +1.496, while that beta is -0.584 for firms with average industry concentration. These results provide empirical evidence that board independence more positively impacts firm performance in concentrated industries, as measured by ROE, than in competitive industries.

In addition, our panel regression model yields the same findings as Table 4.3 presented: *Control* positively associates with firm performance in terms of *ROE* (p-value=0.02 for *Concentration* and p-value=0.023 for *CR4*). *GovStatus* consistently has a negative relationship with our three performance measures.

Furthermore, to ensure the robustness of our findings, we conducted an additional panel regression without controlling for industry type. The results of this analysis, presented in Appendix 8, were consistent with the findings reported in Table 4.4. This consistency in results further strengthens the validity and reliability of our results, as they are consistent across different model specifications, reaffirming the robustness of our findings.

4.5.3 Political Connections and Firm Governance

The presence of military directors on a firm's board of directors can potentially have implications for the effectiveness of internal governance mechanisms. Two variables, namely the binary variable *Military* (which takes a value of 1 if the firm has a military director on its board and 0 otherwise) and the variable *Military_Precent* (which measures the proportion of military directors to the total board size), are utilized to capture the extent of military directorship in the firm. The hypothesis posits that military directors may disrupt or weaken the internal governance function, potentially diminishing the positive effects it can bring to the firm.

The results in Table 4.5 do not support Hypothesis 4.3, that military directors' presence on the board weakens internal governance mechanisms. A possible explanation for the result is that firms adopt military directors as an add-on to their existing board structure rather than replacing a current director. Therefore, military directors on the board may serve a "rubber stamp" role (apart from their resource provision though connections) so that the firms' internal governance mechanisms are not negatively impacted as they just add additional board seats for the military directors.

A two-sample t-statistic comparison between firms with military directors and those without military directors was conducted, and the results are displayed in Table 4.6. The result suggests that firms with military directors on board have a larger board size than those without military directors (mean 12.569 vs. 11.249, p-value=0.000). This result confirms our suspicion that firms who appoint a military director realize their rubber stamp role and simply add additional board seats so the military directors can fulfill their resource provision role (without affecting governance). This suggests firms can enjoy the potential political benefits of having the military director on the Board without weakening internal governance.

The findings presented in Table 4.5 elucidate the noteworthy association between the dependent variables of *Control* and *GovStatus*, and the performance measures employed in this study. These results are consistent with the earlier findings reported in Tables 4.3 and 4.4, where *Control* and *GovStatus* were found to exhibit similar patterns with the performance measures. Specifically, *Control* positively correlates with Return on Equity (*ROE*), suggesting that block holders serve as a legitimate internal corporate governance mechanism. On the other hand, *GovStatus*

demonstrates a negative correlation with all three performance measures, indicating that military regimes might have a detrimental impact on firm performance and are not well-received by the capital market.

Table 4.5 Moderating Role of Military Directors on the Relation between Internal Governance and Firm Performance

This table presents the estimation results for Hypothesis 4.3, using a sample of 1197 firm-level observations from 2006 to 2018. Firms in the consumer product industry are merged with those in the service industry, as there are only four companies in the consumer product industry for the entire sample period. Technology Industry is omitted as default. The dependent variables are Return on Assets (ROA), Tobin's Q, and Return on Equity (ROE). Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

	(1) ROA	(2) Tobin's Q	(3) ROE	(4) ROA	(5) Tobin's Q	(6) ROE
Constant	21.477***	1.913**	11.571	21.600***	2.016**	11.841
	(5.44)	(0.91)	(13.64)	(5.38)	(0.91)	(13.67)
BoardInd	-0.419	0.983**	-3.96	-0.571	0.753	-4.736
	(2.50)	(0.48)	(5.44)	(2.38)	(0.47)	(5.28)
NoDuality	-0.005	-0.147	0.928	-0.145	-0.153	0.769
	(0.86)	(0.13)	(1.57)	(0.82)	(0.12)	(1.53)
Military	0.263	-0.143	1.525			
	(0.98)	(0.19)	(2.90)			
BoarInd*Military	1.995	0.171	-3.463			
	(3.78)	(0.69)	(9.82)			
NoDuality*Military	-1.33	-0.062	-2.193			
	(1.21)	(0.14)	(2.43)			
Military_Percent				-1.858	-2.282	1.627
				(5.92)	(1.41)	(16.45)
BoardInd *Military_Percent				21.724	7.828	-10.756
				(24.28)	(6.73)	(61.31)
NoDuality*Military_Percent				-6.133	-0.403	-11.909
				(9.33)	(1.17)	(17.31)

Table 4.5 Moderating Role of Military Directors on the Relation between Internal Governance and Firm Performance (cont.)

	(1) ROA	(2) Tobin's Q	(3) ROE	(4) ROA	(5) Tobin's Q	(6) ROE
BoardMeet	-0.046	-0.018	-0.218	-0.048	-0.016	-0.218
	(0.06)	(0.01)	(0.17)	(0.06)	(0.01)	(0.17)
BoardSize	0.168	-0.022	0.767**	0.168	-0.028	0.756**
	(0.12)	(0.02)	(0.30)	(0.12)	(0.02)	(0.30)
Control	1.914	-0.025	6.850**	1.919	-0.017	6.792**
	(1.27)	(0.20)	(3.05)	(1.28)	(0.20)	(3.05)
Family	0.657	0.278	-0.998	0.656	0.277	-1.012
	(1.05)	(0.20)	(2.64)	(1.06)	(0.19)	(2.64)
Gov	-0.291	-0.001	-8.070*	-0.267	-0.013	-7.965*
	(1.48)	(0.20)	(4.32)	(1.45)	(0.20)	(4.16)
Size	-1.045***	-0.035	-0.401	-1.039***	-0.034	-0.383
	(0.33)	(0.05)	(0.77)	(0.33)	(0.05)	(0.77)
Leverage	-0.560**	-0.019	-2.168	-0.579**	-0.024	-2.136
	(0.25)	(0.04)	(1.43)	(0.25)	(0.04)	(1.46)
Slack	15.710***	3.826***	18.919*	15.480***	3.771***	18.825*
	(5.46)	(0.95)	(10.12)	(5.48)	(0.94)	(10.15)
PPE	3.338**	0.105	6.011*	3.319**	0.086	5.901*
	(1.52)	(0.27)	(3.41)	(1.53)	(0.28)	(3.41)
Loss	-3.455***	-0.160***	-10.109***	-3.479***	-0.169***	-10.175***
	(1.01)	(0.06)	(2.74)	(1.01)	(0.06)	(2.75)
Growth	0.023***	0.001	0.079***	0.023***	0.001	0.080***
	(0.01)	0.00	(0.02)	(0.01)	0.00	(0.02)
GovStatus	-1.024***	-0.144**	-2.396***	-1.031***	-0.151**	-2.355***
	(0.37)	(0.07)	(0.84)	(0.37)	(0.06)	(0.84)
Agro & Food	-1.272	0.482	-4.251	-1.344	0.471	-4.294
	(1.61)	(0.34)	(3.42)	(1.60)	(0.34)	(3.42)
Industrials	-4.950***	-0.500**	-12.221***	-4.969***	-0.514**	-12.202***
	(1.63)	(0.21)	(3.90)	(1.62)	(0.21)	(3.94)
Property & Construction	-1.532	-0.121	-2.814	-1.553	-0.117	-2.826
	(1.50)	(0.23)	(3.50)	(1.49)	(0.23)	(3.50)
Resources	-2.546	-0.08	-5.244	-2.609	-0.098	-5.258
	(1.60)	(0.22)	(4.14)	(1.60)	(0.22)	(4.16)
Service	-1.976	0.658**	-4.79	-1.998	0.657**	-4.693
	(1.50)	(0.27)	(3.41)	(1.50)	(0.27)	(3.44)
No. of Obs.	1197	1197	1197	1197	1197	1197
Chi-square test	93.96	97.56	95.74	92.84	98.76	93.83
p-value	0.000	0.000	0.000	0.000	0.000	0.000
R-square	0.2176	0.2653	0.2147	0.2181	0.2679	0.2149

Table 4.6 The difference in board size between firms with and without military directors

This table presents two-sample t-tests of the mean difference between the board size of the firm with military directors and the firms that do not have military directors. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

	Board Size	
Descriptive Statistics	With military directors	Without military directors
No of Observations	233	973
Mean	12.446	11.191
Std.Dev	0.1654	0.0772
	Test Result	
Two Sample T-test	-6.6465***	

In addition, we also hypothesize that the presence of a military director has a direct positive effect on firm performance only when a firm is under heavy government regulation, when it depends on a license or concession from the government to operate, or when it does business transactions with the government. Therefore, we create an additional dummy variable, *GovFirm*, to indicate firms with government-related business transactions or operating under a government concession. Those firms are more likely to have a military director on the Board because they must continue securing political resources for future government contracts and concessions.

Hence, using *GovFirm* as the moderator, we undertake a panel data analysis to investigate the association between companies with military directors and business performance. We employed robust standard errors to account for the potential of heteroscedasticity and random effects estimation to account for individual-level differences that are constant over time. These adjustments ensured that our statistical assessments were accurate even in the presence of non-normal error distributions.

The results of our panel regression are presented in Table 4.7. Columns one to three display the results using the dummy variable *Military* as an indicator of having any military directors on board. Columns four to six display the result using the variable *Military_Percent* as a robustness check. We note that the findings in this regression model contradict our original hypothesis. The direct effect of *GovFirm* on firm performance is positive when we measure the performance using ROA (p-value =0.036 for column one and 0.039 for column four). However, the interaction effect is negative and statistically significant (p-value=0.075 for column one and 0.062 for column four).

Table 4.7 Moderating effect of military director appointment on the relation between government-related firms and performance

This table presents the estimation results for Hypothesis 4.4, using a sample of 1197 firm-level observations from 2006 to 2018. Firms in the consumer product industry are merged with those in the service industry, as there are only four companies in the consumer product industry for the entire sample period. Technology Industry is omitted as default. The dependent variables are Return on Assets (ROA), Tobin's Q, and Return on Equity (ROE). Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
	ROA	Tobin's Q	ROE	ROA	Tobin's Q	ROE
Constant	21.922***	1.795*	13.638	21.329***	1.768*	13.015
	(5.34)	(0.94)	(13.41)	(5.28)	(0.95)	(13.41)
Military	1.107	-0.155	0.806			
	(1.12)	(0.12)	(2.44)			
GovFirm	2.330**	0.103	3.544	2.262**	0.146	3.551
	(1.11)	(0.16)	(2.46)	(1.09)	(0.15)	(2.46)
Military*GovFrim	-2.648*	-0.031	-2.711			
	(1.49)	(0.19)	(3.18)			
Military_Percent				7.718	-0.316	4.19
				(7.07)	(1.02)	(14.63)
Military_Percent*GovFirm				-19.180*	-1.666	-21.954
				(10.26)	(1.58)	(22.83)

Table 4.7 Moderating effect of military director appointment on the relation between government-related firms and performance (cont.)

	(1) ROA	(2) Tobin's Q	(3) ROE	(4) ROA	(5) Tobin's Q	(6) ROE
BoardMeet	-0.053	-0.018	-0.226	-0.052	-0.017	-0.223
	(0.07)	(0.01)	(0.17)	(0.07)	(0.01)	(0.17)
BoardSize	0.172	-0.029	0.788**	0.173	-0.03	0.788**
	(0.11)	(0.02)	(0.31)	(0.11)	(0.02)	(0.31)
Control	1.629	-0.033	6.579**	1.559	-0.058	6.438**
	(1.22)	(0.19)	(2.95)	(1.23)	(0.20)	(2.96)
Family	0.829	0.285	-0.832	0.877	0.3	-0.749
	(1.01)	(0.18)	(2.57)	(1.01)	(0.19)	(2.56)
Gov	-0.419	-0.081	-8.223*	-0.748	-0.134	-8.545**
	(1.41)	(0.18)	(4.21)	(1.42)	(0.18)	(4.18)
Size	-1.100***	-0.014	-0.606	-1.062***	-0.011	-0.566
	(0.33)	(0.06)	(0.77)	(0.33)	(0.06)	(0.77)
Leverage	-0.593**	-0.022	-2.157	-0.593**	-0.026	-2.148
	(0.25)	(0.04)	(1.43)	(0.25)	(0.04)	(1.45)
Slack	15.142***	3.892***	17.366*	15.141***	3.905***	17.429*
	(5.35)	(0.99)	(9.87)	(5.35)	(0.99)	(9.86)
PPE	3.184**	0.092	5.792*	3.240**	0.079	5.812*
	(1.51)	(0.27)	(3.47)	(1.51)	(0.27)	(3.46)
Loss	-3.399***	-0.158***	-10.019***	-3.425***	-0.157***	-10.050***
	(0.98)	(0.06)	(2.71)	(0.98)	(0.06)	(2.72)
Growth	0.023***	0.001	0.082***	0.023***	0.001	0.082***
	(0.01)	0.00	(0.02)	(0.01)	0.00	(0.02)
GovStatus	-0.983***	-0.145**	-2.338***	-1.001***	-0.146**	-2.338***
	(0.37)	(0.07)	(0.85)	(0.37)	(0.07)	(0.85)
Agro & Food	-0.796	0.565*	-3.887	-0.806	0.568*	-3.886
	(1.48)	(0.34)	(3.29)	(1.48)	(0.34)	(3.28)
Industrials	-4.553***	-0.408**	-11.970***	-4.510***	-0.408**	-11.911***
	(1.55)	(0.20)	(3.87)	(1.54)	(0.20)	(3.88)
Property & Construction	-1.567	-0.092	-2.977	-1.615	-0.102	-3.02
	(1.43)	(0.22)	(3.44)	(1.42)	(0.22)	(3.44)
Resources	-2.945*	-0.064	-6.233	-2.850*	-0.05	-6.075
	(1.64)	(0.22)	(4.33)	(1.64)	(0.22)	(4.37)
Service	-1.917	0.689***	-4.808	-1.877	0.693***	-4.714
	(1.46)	(0.27)	(3.42)	(1.45)	(0.26)	(3.42)
No. of Obs.	1197	1197	1197	1197	1197	1197
Wald test of exogeneity	92.75	83.7	81.34	92.1	85.07	81.8
p-value	0.000	0.000	0.000	0.000	0.000	0.000
R-square	0.224	0.275	0.210	0.226	0.276	0.211

Moreover, to ensure our findings' robustness, we conducted an additional panel regression analysis without controlling for industry type, and the results are presented in Appendix 9. Notably, the outcomes of this analysis were consistent with the findings reported in Table 4.7, which further reinforces the validity and reliability of our results. The consistency of our findings across different model specifications enhances the robustness of our conclusions, substantiating the reliability of our research outcomes.

To better understand the interaction effect, we standardized *Military_Percent* and re-ran the regression. The panel regression results using standardized coefficients are presented in Appendix 10. The regression outcomes revealed that the interaction between *Military* and *GovFirm* had a standardized coefficient of -2.648 (with a p-value of 0.075), and the interaction between *Military_Percent* and *GovFirm* had a standardized coefficient of -0.993 (with a p-value of 0.062). These findings suggest that, even after accounting for other variables in the model, a one standard deviation increase in *GovFirm* changes the standard beta of *Military* and *Military_Percent* by -2.648 and -0.993, respectively, as measured by Return on Assets (ROA), while the beta is 1.107 (*Military*) and 0.4 (*Military_Percent*) for firms with average *GovFirm*. These results imply that firms engaged in government-related business transactions tend to perform better compared to those that do not, but their performance is adversely affected when they have a military director on their board.

4.5.4 Political Connection and Financial Misconduct

The presence of military directors on a firm's board of directors can potentially impact the effectiveness of internal governance mechanisms. This may be due to reduced monitoring pressures executives face in firms with military directors. To capture the extent of military directorship in a firm, two variables are utilized: the binary variable *Military* (taking a value of 1 if the firm has a military director on its board and 0 otherwise) and the variable *Military_Percent* (measuring the proportion of military directors to the total board size). The hypothesis posits that military directors may disrupt or weaken the internal governance function, leading to increased engagement in earnings management by executives in these firms. The findings are presented in Tables 4.8 and 4.9.

Our original Hypothesis 4.5 that companies with military directors engage in greater earnings management, is not supported by the findings in Table 4.8. According to the results, there are no discernible differences in earnings quality between companies with and without military directors. The panel regression result reveals that our primary independent variable, *Military*, is statistically insignificant when we measure the earnings quality using *ABN_EXP*, *ABN_PRO*, *ABS_DA*, and *ABS_ACC*, even though the sign of the coefficients for these variables confirms our hypothesis. One explanation could be that many businesses might allocate extra board seats for military directors instead of replacing a regular director with a military director. Such efforts strengthen RTA's political ties while having no bearing on the regular monitoring and supervisory board duties. So, the presence of the military director might merely serve as a symbolic gesture for squinting toward RTA. The findings in Table 4.6, which show that companies with military directors have larger boards than companies without, lend some support to this conjecture.

Table 4.8 presents the estimation results for Hypothesis 4.5, using a sample of 1197 firm-level observations from 2006 to 2018. Due to a lack of pertinent data, companies in the financial business are excluded. Since there are only four companies in the consumer goods industry over the whole sample period, those businesses are combined with those in the service sector. Technology Industry is omitted as default. The dependent variables are earnings management measures. The first type is real earnings management (REM): abnormal operating cash flow (ABN_CFO), abnormal production costs (ABN_PRO), and abnormal discretionary expenses (ABN_EXP). The likelihood of REM is indicated by the more negative values of ABN_CFO and ABN_EXP and the more positive value of ABN_PRO. The second type is accrual-based earnings management (AEM), measured by the total accruals (ABS_ACC) and discretionary accruals (ABS_DA). Both AEM measures take the absolute value, and the higher value indicates the possibility of AEM. Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

Table 4.8 Military connection and earnings quality

	(1) ABN_CFO -	(2) ABN_EXP -	(3) ABN_PRO +	(4) ABS_DA +	(5) ABS_ACC +
Constant	0.071	0.310***	-0.558***	0.317***	0.274***
	(0.09)	(0.05)	(0.14)	(0.06)	(0.05)
Military	0.031**	-0.012	0.002	0.01	0.006
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
Booktomarket	-0.007	0.004	-0.014	0.006	-0.008
	(0.01)	0.00	(0.01)	(0.01)	(0.01)
Loss	0.028**	-0.003	-0.003	0.011	0.026***
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
ROA	0.007***	0	-0.006***	0.001	0
	0.00	0.00	0.00	0.00	0.00
Size	-0.002	-0.016***	0.030***	-0.015***	-0.012***
	0.00	0.00	(0.01)	0.00	0.00
Leverage	-0.005	-0.009	0.005	0	0.001
	0.00	(0.01)	(0.01)	0.00	0.00
Growth	-0.001***	0	0	-0.000**	0
	0.00	0.00	0.00	0.00	0.00
FF_Dummy	0.002	0.002	-0.013	0.024	-0.009
	(0.02)	(0.01)	(0.03)	(0.02)	(0.01)
FF_Own	0.018	0.008	-0.053	-0.026	-0.016
	(0.03)	(0.02)	(0.05)	(0.02)	(0.01)
GovStatus	-0.011*	-0.004	0	-0.026***	-0.008***
	(0.01)	0.00	(0.01)	(0.01)	0.00
Agro & Food	-0.044**	0.05	0.05	-0.019**	0
	(0.02)	(0.04)	(0.05)	(0.01)	(0.01)
Industrials	0.009	-0.01	0.083**	0.003	0.008
	(0.02)	(0.02)	(0.03)	(0.01)	(0.01)
Property & Construction	-0.085***	-0.001	0.014	0.057***	0.024***
	(0.02)	(0.01)	(0.03)	(0.01)	(0.01)
Resources	0.004	-0.005	-0.045	0.024**	0.006
	(0.02)	(0.02)	(0.04)	(0.01)	(0.01)
Service	0.066***	0.009	-0.048	0.032**	0.015**
	(0.02)	(0.02)	(0.04)	(0.02)	(0.01)
No. of Obs.	1185	1185	1184	1171	1173
Chi-square test	146.55	75.55	80.12	99.43	60.09
p-value	0	0	0	0	0
R-square	0.3761	0.0342	0.1577	0.1043	0.0998

To ensure the robustness of our findings, we applied a winsorization technique to the earnings quality measures at the 1% and 99% levels, considering their higher kurtosis levels, as presented in Table 4.2. Subsequently, we re-ran the panel regression using the winsorized earnings quality measures, and the results are presented in Appendix 11. After applying the winsorization technique to the earnings quality

measures and re-running the panel regression using the winsorized data, the results were consistent with those reported in Table 4.8. The consistency of results between the original and winsorized analyses increases the findings' reliability and stability.

Worth noting is that firms with military directors exhibit a significant positive relationship with *ABN_CFO* (p-value=0.014). This finding contradicts our hypothesis, suggesting that firms with military directors generate more cash flow from operations than their normalized level. This result particularly supports the resource provision role of military directors as they can conduit additional resources that firms may find challenging to acquire by themselves through regular operations.

Then, as a robust check, we utilize a different proxy for military directors, *Military_Percent*, to confirm the results of the panel regression result. *Military_Percent* is a measure of the proportion of military directors on the board. This additional measure is to adjust for the possibility of some firms adding extra board seats for military directors. When firms have a higher portion of military directors, they will have a lower portion of regular directors to perform their designated monitoring duties. Therefore, it might weaken the internal governance system and lead to inferior earnings quality. The result is presented in Table 4.9.

Table 4.9 presents the estimation results for Hypothesis 4.5, using a sample of 1197 firm-level observations from 2006 to 2018. Due to a lack of pertinent data, companies in the financial business are excluded. Since there are only four companies in the consumer goods industry over the whole sample period, those businesses are combined with those in the service sector. Technology Industry is omitted as default. The dependent variables are earnings management measures. The first type is real earnings management (REM): abnormal operating cash flow (ABN_CFO), abnormal production costs (ABN_PRO), and abnormal discretionary expenses (ABN_EXP). The likelihood of REM is indicated by the more negative values of ABN_CFO and ABN_EXP and the more positive value of ABN_PRO. The second type is accrual-based earnings management (AEM), measured by the total accruals (ABS_ACC) and discretionary accruals (ABS_DA). Both AEM measures take the absolute value, and the higher value indicates the possibility of AEM. Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different

from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

Table 4.9 Percentage of military directors on board and earnings quality

	(1) ABN_CFO -	(2) ABN_EXP -	(3) ABN_PRO +	(4) ABS_DA +	(5) ABS_ACC +
Constant	0.062	0.313***	-0.564***	0.314***	0.272***
	(0.09)	(0.05)	(0.14)	(0.06)	(0.05)
Military_Percent	0.214*	-0.002	0.1	0.106	0.058
	(0.11)	(0.06)	(0.11)	(0.09)	(0.06)
Booktomarket	-0.007	0.003	-0.014	0.005	-0.008
	(0.01)	0.00	(0.01)	(0.01)	(0.01)
Loss	0.028**	-0.004	-0.003	0.01	0.026***
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
ROA	0.007***	0	-0.006***	0.001	0
	0.00	0.00	0.00	0.00	0.00
Size	-0.002	-0.016***	0.030***	-0.015***	-0.012***
	0.00	0.00	(0.01)	0.00	0.00
Leverage	-0.006	-0.009	0.005	0	0.001
	(0.01)	(0.01)	(0.01)	0.00	0.00
Growth	-0.001***	0	0	-0.000**	0
	0.00	0.00	0.00	0.00	0.00
FF_Dummy	0.002	0.002	-0.012	0.025	-0.009
	(0.02)	(0.01)	(0.03)	(0.02)	(0.01)
FF_Own	0.017	0.01	-0.051	-0.026	-0.016
	(0.03)	(0.02)	(0.05)	(0.02)	(0.01)
GovStatus	-0.012*	-0.004	0	-0.026***	-0.008***
	(0.01)	0.00	(0.01)	(0.01)	0.00
Agro & Food	-0.044**	0.052	0.052	-0.018*	0
	(0.02)	(0.04)	(0.05)	(0.01)	(0.01)
Industrials	0.011	-0.009	0.085**	0.004	0.009
	(0.02)	(0.01)	(0.03)	(0.01)	(0.01)
Property & Construction	-0.086***	0.001	0.015	0.057***	0.024***
	(0.02)	(0.01)	(0.03)	(0.01)	(0.01)
Resources	0.005	-0.005	-0.044	0.025**	0.007
	(0.02)	(0.02)	(0.04)	(0.01)	(0.01)
Service	0.066***	0.012	-0.045	0.033**	0.015**
	(0.02)	(0.02)	(0.04)	(0.02)	(0.01)
No. of Obs.	1185	1185	1184	1171	1173
Chi-square test	137.05	73.98	79.88	99.89	60.71
p-value	0.000	0.000	0.000	0.000	0.000
R-square	0.376	0.035	0.155	0.105	0.101

Similar to the results displayed in Table 4.8, the findings in Table 4.9 also suggest that the coefficient sign for *Military_Percent* in columns two to five matches our hypothesis, but they are statistically insignificant. Therefore, we cannot state that having a higher percentage of military directors on the board is associated with inferior earnings quality. In addition, the relation between *Military_Percent* and *ABN_CFO* is positive and marginally significant (p-value=0.057), confirming the result in Table 4.8.

Furthermore, we extended the winsorization technique to the earnings management measures as an additional robustness check. We re-ran the panel regression by applying the same winsorization procedure as mentioned previously. The results of this analysis were presented in Appendix 12, which showed no significant differences from those in Table 4.9. The consistency of results between the original analysis and the winsorized analyses strengthens the reliability of our findings. The inclusion of Appendix 9 and Appendix 10 further supports the robustness of our research, as it demonstrates that potential outliers do not significantly influence our conclusions in the data.

Finally, in order to make sure that our findings are reliable and unlikely to raise endogeneity issues, we performed a two-stage least squares instrumental variable analysis. To do this, we use an instrumental variable that Treepongkaruna et al. (2023) proposed: *EARLIEST_MCON*. *EARLIEST_MCON* measures the percentage of military directors in the earliest year for each firm. This instrumental variable appears to satisfy the exclusion and relevance requirements. In other words, *EARLIEST_MCON* exhibits a strong correlation, conditional on the other covariates, with the endogenous explanatory variables *Military_Percent,* at the 1% statistical significance level. It is also likely to meet exclusion restrictions, given the value of *Military_Percent* in the first year is unlikely to have any bearing on the quality of earnings in a later year. The results of the second-stage regression are presented in Appendix 13. Our two-stage least square instrumental variable analysis further confirms our findings and suggests that our results are unlikely to be exposed to endogeneity problems, as the instrumented *Military_Percent* is also insignificant.

To further investigate whether the appointment of military directors compromises the board's monitoring role, we now test whether companies with military directors on the audit committee have lower-quality earnings. As one of the most critical

subcommittees of the board, the audit committee is directly accountable for the accuracy of the financial reports. Also, there are often only three members in Thailand's publicly traded corporations, as the SEC mandates that the audit committee comprises at least three independent directors. Therefore, having one military director on the audit committee means only two independent directors are performing their duties instead of three.

The results of the panel regression analysis for Hypothesis 4.6, which examines the impact of military directors' involvement on the audit committee on the firm's earnings quality, are presented in Table 4.10. Our findings indicate no statistically significant difference in earnings quality between firms with military directors serving as audit committee members and firms without them. These results are consistent with those reported in Table 4.8 and Table 4.9. Furthermore, we observed a marginally positive relationship between the variable *MilitaryAC* (military director's involvement on the audit committee) and *ABN_CFO* (abnormal CFO accruals). This suggests that military directors may provide resources and potentially contribute directly to the firm's operating cash flow. These consistent findings further support the notion of military directors' resource provision role in the firm and their potential contribution to operating cash flow.

We also adopted similar winsorization techniques to the earnings management measures and re-ran the panel regression in Table 4.10 again. The results presented in Appendix 13 are consistent with those in Table 4.10. This further validates our earlier conclusions and strengthens the reliability of our results. The inclusion of Table 4.10 and the consistency of results with Tables 4.8 and 4.9 add robustness to our findings and provide evidence for the lack of statistical difference in earnings quality between firms with and without military directors on the audit committee. The positive relationship between *MilitaryAC* and *ABN_CFO* further supports the potential role of military directors in resource provision and their contribution to the firm's financial performance.

Table 4.10 Military director's audit committee membership and earnings quality

This table presents the estimation results for Hypothesis 4.7, using a sample of 1197 firm-level observations from 2006 to 2018. Due to a lack of pertinent data, companies in the financial business are excluded. Since there are only four companies in the consumer goods industry over the whole sample period, those businesses are combined with those in the service sector. Technology Industry is omitted as default. The dependent variables are earnings management measures. The first type is real earnings management (REM): abnormal operating cash flow (ABN_CFO), abnormal production costs (ABN_PRO), and abnormal discretionary expenses (ABN_EXP). The likelihood of REM is indicated by the more negative values of ABN_CFO and ABN_EXP and the more positive value of ABN_PRO. The second type is accrual-based earnings management (AEM), measured by the total accruals (ABS_ACC) and discretionary accruals (ABS_DA). Both AEM measures take the absolute value, and the higher value indicates the possibility of AEM. Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

	(1)	(2)	(3)	(4)	(5)
	ABN_CFO	ABN_EXP	ABN_PRO	ABS_DA	ABS_ACC
	-	-	+	+	+
Constant	0.052	0.319***	-0.565***	0.317***	0.271***
	(0.09)	(0.05)	(0.14)	(0.06)	(0.05)
MilitaryAC	0.027*	-0.009	0.002	-0.004	0.004
	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)
Booktomarket	-0.006	0.003	-0.014	0.006	-0.008
	(0.01)	0.00	(0.01)	(0.01)	(0.01)
Loss	0.029**	-0.003	-0.003	0.011	0.027***
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
ROA	0.007***	0	-0.006***	0.001	0
	0.00	0.00	0.00	0.00	0.00
Size	-0.001	-0.017***	0.030***	-0.014***	-0.012***
	0.00	0.00	(0.01)	0.00	0.00
Leverage	-0.005	-0.009	0.005	0.001	0.001
	(0.01)	(0.01)	(0.01)	(0.00)	(0.00)
Growth	-0.001***	0	0	-0.000**	0
	0.00	0.00	0.00	0.00	0.00
FF_Dummy	-0.002	0.003	-0.013	0.023	-0.01
	(0.02)	(0.01)	(0.03)	(0.02)	(0.01)
FF_Own	0.018	0.008	-0.053	-0.028	-0.016
	(0.03)	(0.02)	(0.05)	(0.02)	(0.01)

Table 4.10 Military director's audit committee membership and earnings quality (cont.)

	(1) ABN_CFO -	(2) ABN_EXP -	(3) ABN_PRO +	(4) ABS_DA +	(5) ABS_ACC +
GovStatus	-0.011*	-0.004	0	-0.025***	-0.008***
	(0.01)	0.00	(0.01)	(0.01)	0.00
Agro & Food	-0.045**	0.051	0.05	-0.021**	-0.001
	(0.02)	(0.04)	(0.05)	(0.01)	(0.01)
Industrials	0.009	-0.01	0.083**	0.002	0.008
	(0.02)	(0.01)	(0.03)	(0.01)	(0.01)
Property & Construction	-0.087***	0	0.014	0.056***	0.024***
	(0.02)	(0.01)	(0.03)	(0.01)	(0.01)
Resources	0.006	-0.005	-0.044	0.024**	0.007
	(0.02)	(0.02)	(0.04)	(0.01)	(0.01)
Service	0.063***	0.011	-0.048	0.030*	0.014*
	(0.02)	(0.02)	(0.04)	(0.02)	(0.01)
No. of Obs.	1185	1185	1184	1171	1173
Chi-square test	134.4	76.65	82.62	100.69	59.79
p-value	0.000	0.000	0.000	0.000	0.000
R-square	0.375	0.034	0.157	0.103	0.099

4.6 Conclusion

This chapter investigates the impact of military directors on the corporate governance of large Thai listed firms, given the country's political turmoil and military coups since 2006, after which several Thai firms appointed former generals to their Board of Directors. The chapter first investigated if better firm governance is associated with higher firm performance during the sample period. The study employs refined measures of board independence and duality, which consider both traditional connections and social ties. The findings indicate that listed Thai firms with more independent directors exhibit higher Tobin's Q, all else equal. Moreover, our analysis in Table 4.4 shows that for firms operating in a concentrated industry, board independence has a more positive impact on firm performance, as measured by Return on Equity (ROE), compared to firms in competitive industries. Prior studies argue that intense product market competition is an effective external governance mechanism to discipline

executives (Giroud & Mueller, 2011; Lin, Li, Zhang, & Chen, 2023; Yu et al., 2017). Product competition, however, is relatively weak in concentrated industries, so internal governance becomes more critical in the absence of adequate external governance.

We also found that when businesses operate under a military government, their performance tends to be poorer. This trend is seen across all three firm performance metrics (ROA, Tobin's Q, and ROE). The findings imply that military rule is generally associated with worse business performance or not being well-received by the market. However, this phenomenon may be plausibly linked to the frequent occurrence of massive demonstrations and societal unrest that preceded the acquisition of power by Thai military governments.

Another intriguing finding we document is that enterprises that conduct business with the government (*GovFirm*) may want to think twice before choosing a military director. We discovered compelling evidence that a military director's presence adversely moderates the favorable association between *GovFirm* and *ROA*. However, it is worth noting that our findings suggest a potential reverse causality in the relationship between military director presence and the association between *GovFirm* and *ROA*. It is possible that the presence of military directors is not the cause of the negative moderation observed but rather a result of weaker financial performance. Government-linked firms (*GovFirm*) with weaker financial performance may appoint more military directors to try to improve their situation. Further research is needed to understand the direction of causality in this relationship fully.

We do not, however, discover concrete proof that the presence of a military director impairs a company's internal governance, as there is no significant link between the military directors' presence and poor earnings quality. We speculate that Thai firms might have increased the number of seats on their board when adding military directors to counter-balance possible adverse effects on monitoring quality. As a result, they can utilize the political resources of military directors without endangering the monitoring performance of their board. The results in Table 4.6 support our conjecture because companies with military directors have significantly bigger boards. In a similar vein, I have not found any proof that companies with military directors engage in more earnings management. We even found that firms with military directors have operating cash flow higher than the typical level, perhaps showing explicit evidence of military directors'

positive resource provision role on company cash flow. Therefore, future research might explore other corporate governance metrics, such as CEO compensation and Corporate social responsibility (CSR) adaptation, to examine the other potential impact of having military directors on board.

More importantly, since firms might symbolically adopt military directors in the board and do not rely on them for monitoring purposes, the resource provision role of military directors is worth further exploration. We do not document a direct relationship between military connection and firm performance. Therefore, the resource provision role of the military director might go beyond simply increasing profitability or market capitalization. Future research might follow this line of work to explore the potential resource provision role using other metrics of firm performance or a more refined methodology using a larger sample of firms.

CHAPTER V
CONCLUSIONS

This dissertation investigates the rise of military directors in the Thai stock market after the 2006 coup. In Chapter II, we conduct a bibliometric analysis of studies on corporate governance with an emphasis on the characteristics of the board. The findings identify the areas of expertise in the study of corporate governance and board characteristics as well as the most renowned and frequently cited researchers in each area of the knowledge domain, pointing the way for future research in this area.

Chapter III investigates whether Thai firms with ties to the government are more likely to have military directors on their boards. We found that companies with government contracts are more likely to have military personnel as board members. Furthermore, our research demonstrates that companies in consolidated industries are more prone to select military directors. This finding may imply companies hire military directors to protect their market share and fend off competition. Lastly, the overarching result indicates that the appointment of (new) military directors does not have a negative impact on the firm's stock performance. It challenges the notion that their appointment might result in negative consequences, such as decreased investor confidence or a deterioration in corporate governance. The absence of a negative effect suggests that other factors, such as the rubber stamp role played by military directors or the overall composition of the board, may be influencing stock market performance instead. The results in this chapter generally support the resource provision role of military directors, but also suggest that it might not be a good choice for firms that are already affiliated with the government.

In Chapter IV, we provide additional support for the effectiveness of board independence on firm performance in Thailand, particularly when the product market is concentrated. We also document that block holders are a potentially effective internal governance tool in Thailand, given their ability to monitor and discipline executives. Also, we discovered that Thai listed firm performance overall declined during periods

of military rule, suggesting that military government is associated with less favorable economic and business climates. However, it is also worth considering the potential influence of political turmoil that proceeded with Thai military coups on the overall economy, firm performance, and investor confidence. While we cannot disregard the impact of those pre-existing conditions, it is notable that the presence of military rule was negatively associated with firm performance over a relatively long period in our sample.

Moreover, we found some evidence supporting that Thai firms symbolically adopt independent military directors, without necessarily impacting the monitoring function of the board, as military directors' presence does not moderate the positive relationship between board independence and Tobin's Q, nor is it associated with lower earnings quality. One plausible explanation for these findings is the notion of military directors serving as rubber stamps, beyond their role in resource provision. Chapter IV presents a compelling explanation of how companies may add more board seats to accommodate military directors, thereby diluting their potential negative influence. This perspective sheds light on the possibility that the appointment of military directors does not significantly impact firm governance and performance due to their limited decision-making authority.

In addition, similar to the results in Chapter III, firms with government-related businesses might suffer lower firm performance when they have military directors on board. However, we note a potential reverse causality between military director presence and the relationship between *GovFirm* and *ROA*. Weaker financial performance may lead to military director appointments rather than the presence of military directors causing the negative moderation observed. For example, firms with weaker financial performance that conduct business with the government (*GovFirm*) may appoint more military directors in an attempt to turn their fortunes around. Further research is needed to understand the direction of causality in this relationship.

The implications of our research findings are significant for multiple stakeholders in Thailand's stock market. First of all, military directors' role in providing resources may not be in conflict with firms' sound corporate governance. Thai firms appear to have the ability to accommodate military directors on their boards without significantly compromising the principles of good corporate governance, as market

reactions to these appointments are insignificant, and there is no adverse effect on firm performance. One way firms may achieve this is by increasing the size of the board to accommodate the military director. By expanding the board, the firm can ensure that the presence of the military director does not displace or compromise the representation of more qualified independent directors or other stakeholders. This allows the military directors to fulfill their resource provision role without greatly impacting firm governance in the Thai context of concentrated ownership.

Also, investors are urged to carefully assess any potential repercussions arising from the appointment of military directors within their investment portfolios. Notably, our results suggest that companies involved in government-related transactions may not experience favorable outcomes from the inclusion of military directors, while those operating in concentrated industries may derive benefits. Furthermore, it is crucial for investors to recognize that firm performance exhibits a positive correlation with *BoardInd* and *Control*, but conversely, a negative association with *GovStatus*. These insights highlight the importance of considering the specific context and dynamics surrounding military directorships when making investment decisions.

While this study contributes to the literature on corporate governance and military director appointments in Thailand, there are limitations to consider. First, this study only examines the SET 100 firms, which do not represent all listed firms in Thailand. Further research can use a larger sample of all SET-listed firms to determine if the findings hold for a more comprehensive sample, including smaller size firms. Second, the study has acknowledged the potential for reverse causality in the relationship between military director appointments and firm performance. Future studies could investigate this relationship using alternative methodologies to address this concern. Third, this study only considers the impact of military director appointments on firm performance. Future research can examine other outcomes such as firm innovation, social responsibility, or risk management. Finally, this study did not consider the characteristics of individual military directors appointed to boards, such as their former rank, experience, or tenure in the military. Further research can investigate these factors and their potential impact on corporate governance and performance. Overall, the limitations of this study present opportunities for further research to extend and refine the findings.

REFERENCES

Abbott, L. J., Park, Y., & Parker, S. (2000). The effects of audit committee activity and independence on corporate fraud. *Managerial Finance, 26*(11), 55.

Abbott, L. J., & Parker, S. (2000). Auditor selection and audit committee characteristics. *Auditing: A Journal of Practice & Theory, 19*(2), 47-66.

Abbott, L. J., Parker, S., & Peters, G. F. (2004). Audit committee characteristics and restatements. *Auditing: A Journal of Practice & Theory, 23*(1), 69-87.

Achleitner, A.-K., Günther, N., Kaserer, C., & Siciliano, G. (2014). Real earnings management and accrual-based earnings management in family firms. *European Accounting Review, 23*(3), 431-461.

Adams, R., Almeida, H., & Ferreira, D. (2009). Understanding the relationship between founder–CEOs and firm performance. *Journal of Empirical Finance, 16*(1), 136-150.

Adams, R. B. (2016). Women on boards: The superheroes of tomorrow? *The Leadership Quarterly, 27*(3), 371-386.

Adams, R. B., Almeida, H., & Ferreira, D. (2005). Powerful CEOs and their impact on corporate performance. *The Review of Financial Studies, 18*(4), 1403-1432.

Adams, R. B., & Ferreira, D. (2007). A theory of friendly boards. *The Journal of Finance, 62*(1), 217-250.

Adams, R. B., & Ferreira, D. (2009). Women in the boardroom and their impact on governance and performance. *Journal of Financial Eonomics, 94*(2), 291-309.

Adams, R. B., Hermalin, B. E., & Weisbach, M. S. (2010). The role of boards of directors in corporate governance: A conceptual framework and survey. *Journal of Economic Literature, 48*(1), 58-107.

Aggarwal, R., Erel, I., Ferreira, M., & Matos, P. (2011). Does governance travel around the world? Evidence from institutional investors. *Journal of Financial Economics, 100*(1), 154-181.

Aggarwal, R., Erel, I., Stulz, R., & Williamson, R. (2008). Differences in governance practices between US and foreign firms: Measurement, causes, and consequences. *The Review of Financial Studies, 22*(8), 3131-3169.

Aggarwal, R. K., Meschke, F., & Wang, T. Y. (2012). Corporate political donations: investment or agency? *Business and Politics, 14*(1), 1-38.

Agrawal, A., & Knoeber, C. R. (2001). Do some outside directors play a political role? *Journal of Law and Economics, 44*(1), 179-198.

Agrawal, A., & Mandelker, G. N. (1990). Large shareholders and the monitoring of managers: The case of antitakeover charter amendments. *Journal of Financial and Quantitative Analysis, 25*(02), 143-161.

Alagappa, M. (2001). *Coercion and governance: the declining political role of the military in Asia*: Stanford University Press.

Ali, A., Klasa, S., & Yeung, E. (2008). The limitations of industry concentration measures constructed with Compustat data: Implications for finance research. *Review of Financial Studies*, 22(10), 3839-3871.

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*, 101172.

Anderson, R. C., Mansi, S. A., & Reeb, D. M. (2004). Board characteristics, accounting report integrity, and the cost of debt. *Journal of Accounting and Economics, 37*(3), 315-342.

Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership and firm performance: evidence from the S&P 500. *Journal of Finance, 58*(3), 1301-1328.

Anderson, R. C., & Reeb, D. M. (2004). Board composition: Balancing family influence in S&P 500 firms. *Administrative Science Quarterly, 49*(2), 209-237.

Aras, G., & Crowther, D. (2008). Governance and sustainability. *Management Decision, 46*(3), 433-448.

Arayakarnkul, P., Chatjuthamard, P., Lhaopadchan, S., & Treepongkaruna, S. (2022). Corporate governance, board connections and remuneration. *Corporate Social Responsibility and Environmental Management*, 29(4), 795-808.

Armstrong, C. S., Ittner, C. D., & Larcker, D. F. (2012). Corporate governance, compensation consultants, and CEO pay levels. *Review of Accounting Studies, 17*(2), 322-351.

Arora, P., & Dharwadkar, R. (2011). Corporate governance and corporate social responsibility (CSR): The moderating roles of attainment discrepancy and organization slack. *Corporate Governance: An International Review, 19*(2), 136-152.

Badertscher, B. A. (2011). Overvaluation and the choice of alternative earnings management mechanisms. *Accounting Review, 86*(5), 1491-1518.

Baker, C. (2016). The 2014 Thai coup and some roots of authoritarianism. *Journal of Contemporary Asia, 46*(3), 388-404.

Baldwin, R. E., & Magee, C. S. (2000). Is trade policy for sale? Congressional voting on recent trade bills. *Public Choice, 105*(1-2), 79-101.

Baliga, B. R., Moyer, R. C., & Rao, R. S. (1996). CEO duality and firm performance: What's the fuss? *Strategic Management Journal, 17*(1), 41-53.

Ball, R., & Shivakumar, L. (2006). The role of accruals in asymmetrically timely gain and loss recognition. *Journal of Accounting Research, 44*(2), 207-242.

Bao, X., Johan, S., & Kutsuna, K. (2016). Do political connections matter in accessing capital markets? Evidence from China. *Emerging Markets Review, 29*, 24-41.

Barth, E., Gulbrandsen, T., & Schønea, P. (2005). Family ownership and productivity: The role of owner-management. *Journal of Corporate Finance, 11*(1-2), 107-127.

Baysinger, B. D., Kosnik, R. D., & Turk, T. A. (1991). Effects of board and ownership structure on corporate R&D strategy. *Academy of Management Journal, 34*(1), 205-214.

Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *Accounting Review*, 443-465.

Beasley, M. S., & Petroni, K. R. (2001). Board independence and audit-firm type. *Auditing: A Journal of Practice & Theory, 20*(1), 97-114.

Beaulieu, E., & Magee, C. (2004). Four simple tests of campaign contributions and trade policy preferences. *Economics & Politics, 16*(2), 163-187.

Bédard, J., & Paquette, S. M. (2021). Audit Committee Financial Expertise, Litigation Risk, and Auditor-Provided Tax Services*. *Accounting Perspectives, 20*(1), 7-48.

Bell, A., & Jones, K. (2015). Explaining fixed effects: Random effects modeling of time-series cross-sectional and panel data. *Political Science Research and Methods*, 3(1), 133-153.

Benmelech, E., & Frydman, C. (2015). Military ceos. *Journal of Financial Economics, 117*(1), 43-59.

Berle, A., & Means, G. (1932). The Modern Corporation and Private Property (Mac-Millan, New York, NY).

Bhagat, S., & Black, B. (2001). The non-correlation between board independence and long-term firm performance. *Journal of Corporation Law., 27*, 231.

Bhagat, S., & Bolton, B. (2008). Corporate governance and firm performance. *Journal of Corporate Finance, 14*(3), 257-273.

Bhattacharya, S., & Basu, P. (1998). Mapping a research area at the micro level using co-word analysis. *Scientometrics, 43*(3), 359-372.

Blau, B. M., Brough, T. J., & Thomas, D. W. (2013). Corporate lobbying, political connections, and the bailout of banks. *Journal of Banking & Finance, 37*(8), 3007-3017.

Bliss, M. A., & Gul, F. A. (2012). Political connection and cost of debt: Some Malaysian evidence. *Journal of Banking & Finance, 36*(5), 1520-1527.

Boivie, S., Bednar, M. K., Aguilera, R. V., & Andrus, J. L. (2016). Are boards designed to fail? The implausibility of effective board monitoring. *Academy of Management Annals, 10*(1), 319-407.

Börner, K., Chen, C., & Boyack, K. W. (2003). Visualizing knowledge domains. *Annal Review of Information Science Technology, 37*(1), 179-255.

Boubakri, N., Cosset, J.-C., & Saffar, W. (2008). Political connections of newly privatized firms. *Journal of Corporate Finance, 14*(5), 654-673.

Boubakri, N., Guedhami, O., Mishra, D., & Saffar, W. (2012). Political connections and the cost of equity capital. *Journal of Corporate Finance, 18*(3), 541-559.

Boyack, K. W., & Klavans, R. (2010). Co-citation analysis, bibliographic coupling, and direct citation: Which citation approach represents the research front most accurately? *Journal of the American Society for Information Science Technology, 61*(12), 2389-2404.

Braam, G., Nandy, M., Weitzel, U., & Lodh, S. (2015). Accrual-based and real earnings management and political connections. *The International Journal of Accounting, 50*(2), 111-141.

Brick, I. E., & Chidambaran, N. (2010). Board meetings, committee structure, and firm value. *Journal of Corporate Finance, 16*(4), 533-553.

Brickley, J. A., Coles, J. L., & Terry, R. L. (1994). Outside directors and the adoption of poison pills. *Journal of Financial Economics, 35*(3), 371-390.

Bruynseels, L., & Cardinaels, E. (2014). The audit committee: Management watchdog or personal friend of the CEO? *Accounting Review, 89*(1), 113-145.

Bunkanwanicha, P., Fan, J. P., & Wiwattanakantang, Y. (2013). The value of marriage to family firms. *Journal of Financial and Quantitative Analysis, 48*(2), 611-636.

Bunkanwanicha, P., & Wiwattanakantang, Y. (2008). Big business owners in politics. *Review of Financial Studies, 22*(6), 2133-2168.

Burgstahler, D., & Dichev, I. (1997). Earnings management to avoid earnings decreases and losses. *Journal of Accounting and Economics, 24*(1), 99-126.

Burris, V. (2001). The two faces of capital: Corporations and individual capitalists as political actors. *American Sociological Review*, 361-381.

Callon, M., Courtial, J. P., & Laville, F. (1991). Co-word analysis as a tool for describing the network of interactions between basic and technological research: The case of polymer chemsitry. *Scientometrics, 22*, 155-205.

Cambrosio, A., Limoges, C., Courtial, J., & Laville, F. (1993). Historical scientometrics? Mapping over 70 years of biological safety research with coword analysis. *Scientometrics, 27*(2), 119-143.

Campbell, J. L. (2007). Why would corporations behave in socially responsible ways?: An institutional theory of corporate social responsibility. *Academy of Management Review, 32*(3), 946-967.

Campbell, K., & Mínguez-Vera, A. (2008). Gender diversity in the boardroom and firm financial performance. *Journal of Business Ethics, 83*, 435-451.

Cartwright, W., & Craig, J. L. (2006). Sustainability: aligning corporate governance, strategy and operations with the planet. *Business Process Management Journal, 12*(6), 741-750. doi:10.1108/14637150610710909

Chambers, P., & Waitoolkiat, N. (2016). The resilience of monarchised military in Thailand. *Journal of Contemporary Asia, 46*(3), 425-444.

Chancharat, S., Detthamrong, U., & Chancharat, N. (2019). Board structure, political connection and firm performance: Evidence from Thailand. *International Journal of Business & Society, 20*(3).

Chaney, P. K., Faccio, M., & Parsley, D. (2011). The quality of accounting information in politically connected firms. *Journal of Accounting and Economics, 51*(1-2), 58-76.

Cheema, M. U., Munir, R., & Su, S. (2016). Political connections and organisational performance: evidence from Pakistan. *International Journal of Accounting & Information Management, 24*(4), 321-338.

Chen, C. R., Li, Y., Luo, D., & Zhang, T. (2017). Helping hands or grabbing hands? An analysis of political connections and firm value. *Journal of Banking & Finance, 80*, 71-89.

Chen, H., An, M., Wang, Q., Ruan, W., & Xiang, E. (2021). Military executives and corporate environmental information disclosure: Evidence from China. *Journal of Cleaner Production, 278*, 123404.

Chen, S., & Komal, B. (2018). Audit committee financial expertise and earnings quality: A meta-analysis. *Journal of Business Research, 84*, 253-270.

Chen, Y.-S., Shen, C.-H., & Lin, C.-Y. (2014). The benefits of political connection: Evidence from individual bank-loan contracts. *Journal of Financial Services Research, 45*(3), 287-305.

Cheng, S. (2004). R&D expenditures and CEO compensation. *Accounting Review, 79*(2), 305-328.

Civilize, S., Wongchoti, U., & Young, M. (2015). Military regimes and stock market performance. *Emerging Markets Review, 22*, 76-95.

Civilize, S., Wongchoti, U., & Young, M. (2015). Political connection and stock returns: A longitudinal study. *Financial Review*, 50(1), 89-119.

Claessens, S., Djankov, S., Fan, J. P., & Lang, L. H. (2002). Disentangling the incentive and entrenchment effects of large shareholdings. *Journal of Finance, 57*(6), 2741-2771.

Claessens, S., Djankov, S., & Lang, L. H. (2000). The separation of ownership and control in East Asian corporations. *Journal of Financial Economics, 58*(1-2), 81-112.

Claessens, S., Feijen, E., & Laeven, L. (2008). Political connections and preferential access to finance: The role of campaign contributions. *Journal of Financial Economics, 88*(3), 554-580.

Clifford, P., & Evans, R. (1997). Non-executive directors: A question of independence. *Corporate Governance: An International Review*, *5*(4), 224-231.

Cohen, D. A., Dey, A., & Lys, T. Z. (2008). Real and accrual-based earnings management in the pre-and post-Sarbanes-Oxley periods. *Accounting Review*, *83*(3), 757-787.

Cohen, D. A., Mashruwala, R., & Zach, T. (2010). The use of advertising activities to meet earnings benchmarks: Evidence from monthly data. *Review of Accounting Studies, 15*(4), 808-832.

Cohen, D. A., & Zarowin, P. (2010). Accrual-based and real earnings management activities around seasoned equity offerings. *Journal of Accounting and Economics, 50*(1), 2-19.

Cohen, J. R., Krishnamoorthy, G., & Wright, A. (2010). Corporate governance in the post-Sarbanes-Oxley era: Auditors' experiences. *Contemporary Accounting Research, 27*(3), 751-786.

Cohen, J. R., Krishnamoorthy, G., & Wright, A. M. (2004). The corporate governance mosaic and financial reporting quality. *Journal of Accounting Literature*, 87-152.

Cohen, J. R., Krishnamoorthy, G., & Wright, A. M. (2008). Form versus substance: The implications for auditing practice and research of alternative perspectives on corporate governance. *Auditing: A Journal of Practice & Theory*, *27*(2), 181-198.

Coles, J. L., Daniel, N. D., & Naveen, L. (2014). Co-opted boards. *The Review of Financial Studies, 27*(6), 1751-1796.

Conyon, M. J., & He, L. (2011). Executive compensation and corporate governance in China. *Journal of Corporate Finance, 17*(4), 1158-1175.

Cooper, M. J., Gulen, H., & Ovtchinnikov, A. V. (2010). Corporate political contributions and stock returns. *Journal of Finance, 65*(2), 687-724.

Core, J., & Guay, W. (1999). The use of equity grants to manage optimal equity incentive levels. *Journal of Accounting and Economics, 28*(2), 151-184.

Core, J. E., Guay, W. R., & Larcker, D. F. (2003). Executive equity compensation and incentives: a survey. *Economic Policy Review, 9*(Apr), 27-50.

Core, J. E., Holthausen, R. W., & Larcker, D. F. (1999). Corporate governance, chief executive officer compensation, and firm performance. *Journal of Financial Economics, 51*(3), 371-406.

Cornett, M. M., Marcus, A. J., & Tehranian, H. (2008). Corporate governance and pay-for-performance: The impact of earnings management. *Journal of Financial Economics, 87*(2), 357-373.

Culnan, M. (1986). The intellectual development of management information systems, 1972–1982: A co-citation analysis. *Management Science, 32*(2), 156-172.

Culnan, M. (1987). Mapping the intellectual structure of MIS, 1980-1985: a co-citation analysis. *MIS Quarterly*, 341-353.

Dahya, J., Dimitrov, O., & McConnell, J. J. (2008). Dominant shareholders, corporate boards, and corporate value: A cross-country analysis. *Journal of Financial Economics, 87*(1), 73-100.

Daily, C. M., & Dalton, D. R. (1992). The relationship between governance structure and corporate performance in entrepreneurial firms. *Journal of Business Venturing, 7*(5), 375-386.

Daily, C. M., Dalton, D. R., & Cannella Jr, A. A. (2003). Corporate governance: Decades of dialogue and data. *Academy of Management Review, 28*(3), 371-382.

Daily, C. M., Johnson, J. L., Ellstrand, A. E., & Dalton, D. R. (1998). Compensation committee composition as a determinant of CEO compensation. *Academy of Management Journal, 41*(2), 209-220.

Dalton, D. R., Daily, C. M., Ellstrand, A. E., & Johnson, J. L. (1998). Meta-analytic reviews of board composition, leadership structure, and financial performance. *Strategic Management Journal, 19*(3), 269-290.

Dalton, D. R., Daily, C. M., Johnson, J. L., & Ellstrand, A. E. (1999). Number of directors and financial performance: A meta-analysis. *Academy of Management Journal, 42*(6), 674-686.

Dalton, D. R., Hitt, M. A., Certo, S. T., & Dalton, C. M. (2007). The fundamental agency problem and its mitigation: independence, equity, and the market for corporate control. *Academy of Management Annals, 1*(1), 1-64.

Davidson III, W. N., & Worrell, D. L. (2001). Regulatory pressure and environmental management infrastructure and practices. *Business & Society, 40*(3), 315-342.

Davidson, R., Goodwin-Stewart, J., & Kent, P. (2005). Internal governance structures and earnings management. *Accounting & Finance, 45*(2), 241-267.

Davidson, W. N., Jiraporn, P., Kim, Y. S., & Nemec, C. (2004). Earnings Management Following Duality-Creating Successions: Ethnostatistics, Impression Management and Agency Theory. *Academy of Management Journal, 47*.

Davidson, W. N., Xie, B., & Xu, W. (2004). Market reaction to voluntary announcements of audit committee appointments: The effect of financial expertise. *Journal of Accounting and Public Policy, 4*(23), 279-293.

De Jager, P., De Kock, F., & Van der Spuy, P. (2017). Do not feed the predators. *South African Journal of Business Management, 48*(3), 35-45.

Dechow, P. M., & Dichev, I. D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *Accounting Review, 77*(s-1), 35-59.

Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting earnings management. *Accounting Review*, 193-225.

Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1996). Causes and consequences of earnings manipulation: An analysis of firms subject to enforcement actions by the SEC. *Contemporary Accounting Research, 13*(1), 1-36.

Desender, K. A., Aguilera, R. V., Crespi, R., & GarcÍa-cestona, M. (2013). When does ownership matter? Board characteristics and behavior. *Strategic Management Journal, 34*(7), 823-842.

Dhaliwal, D., Naiker, V., & Navissi, F. (2010). The association between accruals quality and the characteristics of accounting experts and mix of expertise on audit committees. *Contemporary Accounting Research, 27*(3), 787-827.

Ding, R., Li, J., & Wu, Z. (2018). Government affiliation, real earnings management, and firm performance: The case of privately held firms. *Journal of Business Research, 83*, 138-150.

Djankov, S., La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (2008). The law and economics of self-dealing. *Journal of Financial Economics, 88*(3), 430-465.

Donaldson, L., & Davis, J. H. (1991). Stewardship theory or agency theory: CEO governance and shareholder returns. *Australian Journal of Management, 16*(1), 49-64.

Drope, J. M., & Hansen, W. L. (2004). Purchasing protection? The effect of political spending on US trade policy. *Political Research Quarterly, 57*(1), 27-37.

Durisin, B., & Puzone, F. (2009). Maturation of corporate governance research, 1993–2007: An assessment. *Corporate Governance: An International Review, 17*(3), 266-291.

Elkington, J. (2006). Governance for Sustainability*. *Corporate Governance: An International Review, 14*(6), 522-529.

Elson, C. M. (1996). Director Compensation and the Management-Captured Board-The History of a Symptom and a Cure. *SMU Law Review., 50*, 127.

Eng, L., & Mak, Y. (2003). Corporate governance and voluntary disclosure. *Journal of Accounting and Public Policy, 22*(4), 325-325.

Enric Ricart, J., Ángel Rodríguez, M., & Sánchez, P. (2005). Sustainability in the boardroom. *Corporate Governance: The International Journal of Business in Society, 5*(3), 24-41.

Erhardt, N. L., Werbel, J. D., & Shrader, C. B. (2003). Board of director diversity and firm financial performance. *Corporate Governance: An International Review, 11*(2), 102-111.

Faccio, M. (2006). Politically connected firms. *American Economic Review, 96*(1), 369-386.

Faccio, M. (2010). Differences between politically connected and nonconnected firms: A cross-country analysis. *Financial Management, 39*(3), 905-928.

Faccio, M., Masulis, R. W., & McConnell, J. J. (2006). Political connections and corporate bailouts. *Journal of Finance, 61*(6), 2597-2635.

Fama, E. F. (1980). Agency problems and the theory of the firm. *Journal of Political Economy, 88*(2), 288-307.

Fama, E. F., & Jensen, M. C. (1983a). Agency problems and residual claims. *Journal of Law and Economics, 26*(2), 327-349.

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

Fan, J. P., & Wong, T. J. (2002). Corporate ownership structure and the informativeness of accounting earnings in East Asia. *Journal of Accounting and Economics, 33*(3), 401-425.

Farber, D. B. (2005). Restoring trust after fraud: Does corporate governance matter? *Accounting Review, 80*(2), 539-561.

Ferguson, T., & Voth, H.-J. (2008). Betting on Hitler—the value of political connections in Nazi Germany. *Quarterly Journal of Economics, 123*(1), 101-137.

Ferreira, M. P., Santos, J. C., de Almeida, M. I. R., & Reis, N. R. (2014). Mergers & acquisitions research: A bibliometric study of top strategy and international business journals, 1980–2010. *Journal of Business Research, 67*(12), 2550-2558.

Fields, T. D., Lys, T. Z., & Vincent, L. (2001). Empirical research on accounting choice. *Journal of Accounting and Economics, 31*(1-3), 255-307.

Finkelstein, S., & D'aveni, R. A. (1994). CEO duality as a double-edged sword: How boards of directors balance entrenchment avoidance and unity of command. *Academy of Management Journal, 37*(5), 1079-1108.

Finkelstein, S., & Hambrick, D. C. (1990). Top-management-team tenure and organizational outcomes: The moderating role of managerial discretion. *Administrative Science Quarterly*, 484-503.

Fisman, R. (2001). Estimating the value of political connections. *American Economic Review, 91*(4), 1095-1102.

Fordham, B. O., & McKeown, T. J. (2003). Selection and influence: Interest groups and congressional voting on trade policy. *International Organization, 57*(3), 519-549.

Forker, J. J. (1992). Corporate Governance and Disclosure Quality. *Accounting and Business Research, 22*(86), 111.

Francis, B., Hasan, I., & Li, L. (2016). A cross-country study of legal-system strength and real earnings management. *Journal of Accounting and Public Policy, 35*(5), 477-512.

Francis, J., LaFond, R., Olsson, P., & Schipper, K. (2005). The market pricing of accruals quality. *Journal of Accounting and Economics, 39*(2), 295-327.

Francoeur, C., Labelle, R., & Sinclair-Desgagné, B. (2008). Gender diversity in corporate governance and top management. *Journal of Business Ethics, 81*, 83-95.

Freeman, R. E., & Evan, W. M. (1990). Corporate governance: A stakeholder interpretation. *Journal of Behavioral Economics, 19*(4), 337-359.

Freeman, R. E., & Reed, D. L. (1983). Stockholders and stakeholders: A new perspective on corporate governance. *California Management Review, 25*(3), 88-106.

Girotti, M., & Salvadè, F. (2022). Competition and Agency Problems Within Banks: Evidence from Insider Lending. *Management Science, 68*(5), 3791-3812.

Giroud, X., & Mueller, H. M. (2010). Does corporate governance matter in competitive industries? *Journal of Financial Economics, 95*(3), 312-331.

Giroud, X., & Mueller, H. M. (2011). Corporate governance, product market competition, and equity prices. *Journal of Finance, 66*(2), 563-600.

Gmür, M. (2003). Co-citation analysis and the search for invisible colleges: A methodological evaluation. *Scientometrics, 57*(1), 27-57.

Goldman, E., Rocholl, J., & So, J. (2009). Do politically connected boards affect firm value? *Review of Financial Studies, 22*(6), 2331-2360.

Goldman, E., Rocholl, J., & So, J. (2013). Politically connected boards of directors and the allocation of procurement contracts. *Review of Finance, 17*(5), 1617-1648.

Gomez-Mejia, L. R., Cruz, C., Berrone, P., & De Castro, J. (2011). The bind that ties: Socioemotional wealth preservation in family firms. *Academy of Management Annals, 5*(1), 653-707.

Gómez-Mejía, L. R., Haynes, K. T., Núñez-Nickel, M., Jacobson, K. J., & Moyano-Fuentes, J. (2007). Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills. *Administrative Science Quarterly, 52*(1), 106-137.

Gozgor, G., Demir, E., & Bilgin, M. H. (2017). The effects of the military in politics on the inbound tourism: Evidence from Turkey. *Asia Pacific Journal of Tourism Research, 22*(8), 885-893.

Graham, J. R., Harvey, C. R., & Rajgopal, S. (2005). The economic implications of corporate financial reporting. *Journal of Accounting and Economics, 40*(1-3), 3-73.

Gray, S., Harymawan, I., & Nowland, J. (2016). Political and government connections on corporate boards in Australia: Good for business? *Australian Journal of Management, 41*(1), 3-26.

Gross, C., Königsgruber, R., Pantzalis, C., & Perotti, P. (2016). The financial reporting consequences of proximity to political power. *Journal of Accounting and Public Policy, 35*(6), 609-634.

Gul, F. A. (2006). Auditors' response to political connections and cronyism in Malaysia. *Journal of Accounting Research, 44*(5), 931-963.

Gunny, K. A. (2010). The relation between earnings management using real activities manipulation and future performance: Evidence from meeting earnings benchmarks. *Contemporary Accounting Research, 27*(3), 855-888.

Habib, A., Muhammadi, A. H., & Jiang, H. (2017). Political connections, related party transactions, and auditor choice: Evidence from Indonesia. *Journal of Contemporary Accounting & Economics, 13*(1), 1-19.

Hallinger, P., & Suriyankietkaew, S. (2018). Science Mapping of the Knowledge Base on Sustainable Leadership, 1990–2018. *Sustainability, 10*(12), 4846.

Hambrick, D. C., & Mason, P. A. (1984). Upper echelons: The organization as a reflection of its top managers. *Academy of Management Review, 9*(2), 193-206.

Hambrick, D. C., Misangyi, V. F., & Park, C. A. (2015). The quad model for identifying a corporate director's potential for effective monitoring: Toward a new

theory of board sufficiency. *Academy of Management Review, 40*(3), 323-344.

Hansen, W. L. (1990). The International Trade Commission and the politics of protectionism. *American Political Science Review, 84*(1), 21-46.

Hansen, W. L., & Mitchell, N. J. (2000). Disaggregating and explaining corporate political activity: Domestic and foreign corporations in national politics. *American Political Science Review, 94*(4), 891-903.

Harrigan, N. M. (2017). Motives of corporate political donations: industry regulation, subjective judgement and the origins of pragmatic and ideological corporations. *The British Journal of Sociology, 68*(4), 718-753.

Hart, D. M. (2001). Why do some firms give? Why do some give a lot?: High-tech PACs, 1977–1996. *Journal of Politics, 63*(4), 1230-1249.

Harymawan, I. (2018). Why do firms appoint former military personnel as directors? Evidence of loan interest rate in militarily connected firms in Indonesia. *Asian Review of Accounting*, 26(1), 2-18.

Harymawan, I. (2020). Military reform, militarily-connected firms and auditor choice. *Managerial Auditing Journal, 35*(6), 705-729.

Harymawan, I., & Nowland, J. (2016). Political connections and earnings quality. *International Journal of Accounting & Information Management*, 24(4), 339-356.

Harzing, A.-W., & Alakangas, S. (2016). Google Scholar, Scopus and the Web of Science: a longitudinal and cross-disciplinary comparison. *Scientometrics, 106*(2), 787-804.

Hermalin, B. E., & Weisbach, M. S. (1991). The effects of board composition and direct incentives on firm performance. *Financial Management*, 101-112.

Hermalin, B. E., & Weisbach, M. S. (1998). Endogenously chosen boards of directors and their monitoring of the CEO. *American Economic Review*, 96-118.

Hermalin, B. E., & Weisbach, M. S. (2003). Boards of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature. *Economic Policy Review, 9*(1).

Hersch, P. L., & McDougall, G. S. (2000). Determinants of automobile PAC contributions to house incumbents: Own versus rival effects. *Public Choice, 104*(3-4), 329-343.

Hewison, K. (2010). Thaksin Shinawatra and the reshaping of Thai politics. *Contemporary Politics, 16*(2), 119-133.

Hillman, A. J. (2005). Politicians on the board of directors: Do connections affect the bottom line? *Journal of Management, 31*(3), 464-481.

Hillman, A. J., Cannella, A. A., & Paetzold, R. L. (2000). The resource dependence role of corporate directors: Strategic adaptation of board composition in response to environmental change. *Journal of Management Studies, 37*(2), 235-255.

Hillman, A. J., & Dalziel, T. (2003). Boards of directors and firm performance: Integrating agency and resource dependence perspectives. *Academy of Management Review, 28*(3), 383-396.

Hillman, A. J., Keim, G. D., & Schuler, D. (2004). Corporate political activity: A review and research agenda. *Journal of Management, 30*(6), 837-857.

Hillman, A. J., Nicholson, G., & Shropshire, C. (2008). Directors' multiple identities, identification, and board monitoring and resource provision. *Organization Science, 19*(3), 441-456.

Hillman, A. J., Withers, M. C., & Collins, B. (2009). Resource dependence theory: A review. *Journal of Management, 35*(6), 1404-1427.

Hong, B., Li, Z., & Minor, D. (2016). Corporate governance and executive compensation for corporate social responsibility. *Journal of Business Ethics, 136*, 199-213.

Houston, J. F., Jiang, L., Lin, C., & Ma, Y. (2014). Political connections and the cost of bank loans. *Journal of Accounting Research, 52*(1), 193-243.

Houston, R., & Ferris, S. (2015). Does the revolving door swing both ways? The value of political connections to US firms. *Managerial Finance, 41*(10), 1002.

Huang, R. L. (2013). Re-thinking Myanmar's political regime: military rule in Myanmar and implications for current reforms. *Contemporary Politics, 19*(3), 247-261.

Huse, M. (2007). *Boards, governance and value creation: The human side of corporate governance*: Cambridge University Press.

Hussain, N., Rigoni, U., & Orij, R. P. (2018). Corporate governance and sustainability performance: Analysis of triple bottom line performance. *Journal of Business Ethics, 149*, 411-432.

Hwang, B.-H., & Kim, S. (2009). It pays to have friends. *Journal of Financial Economics, 93*(1), 138-158.

Ikram, A., Li, Z. F., & Minor, D. (2019). CSR-contingent executive compensation contracts. *Journal of Banking & Finance*, 105655.

Jaroenjitrkam, A., & Maneenop, S. (2022). Two sides of military connected firms: Evidence from Thailand. Available at SSRN 4019106.

Jensen, M. C. (1993). The modern industrial revolution, exit, and the failure of internal control systems. *Journal of Finance, 48*(3), 831-880.

Jensen, M. C. (2005). Agency costs of overvalued equity. *Financial Management, 34*(1), 5-19.

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.

Jiraporn, P., Kim, Y. S., Davidson, W. N., & Singh, M. (2006). Corporate governance, shareholder rights and firm diversification: An empirical analysis. *Journal of Banking & Finance*, 30(3), 947-963.

Jo, H., & Harjoto, M. A. (2011). Corporate governance and firm value: The impact of corporate social responsibility. *Journal of Business Ethics, 103*, 351-383.

Johnson, J. L., Daily, C. M., & Ellstrand, A. E. (1996). Boards of directors: A review and research agenda. *Journal of Management, 22*(3), 409-438.

Johnson, S., & Mitton, T. (2003). Cronyism and capital controls: evidence from Malaysia. *Journal of Financial Economics, 67*(2), 351-382.

Jones, J. J. (1991). Earnings management during import relief investigations. *Journal of Accounting Research, 29*(2), 193-228.

Joni, J., Ahmed, K., & Hamilton, J. (2020). Politically connected boards, family business groups and firm performance: Evidence from Indonesia. *Journal*

of Accounting & Organizational Change, 16(1), 93-121. doi:10.1108/JAOC-09-2019-0091

Kang, J. K., & Zhang, L. (2018). Do Outside Directors with Government Experience Create Value? *Financial Management, 47*(2), 209-251.

Khwaja, A. I., & Mian, A. (2005). Do lenders favor politically connected firms? Rent provision in an emerging financial market. *Quarterly Journal of Economics, 120*(4), 1371-1411.

Kim, C., & Zhang, L. (2016). Corporate political connections and tax aggressiveness. *Contemporary Accounting Research, 33*(1), 78-114.

Kim, D., & Starks, L. T. (2016). Gender diversity on corporate boards: Do women contribute unique skills? *American Economic Review, 106*(5), 267-271.

Kim, H.-D., Oh, J. Y. J., & Park, K. (2017). *Men of Honor: Military CEOS and Directors in Korea.* Paper presented at the Asian Finance Association (AsianFA) 2017 Conference.

Kim, K.-H., & Rasheed, A. A. (2014). Board heterogeneity, corporate diversification and firm performance. *Journal of Management Research, 14*(2), 121-139.

Klapper, L. F., & Love, I. (2004). Corporate governance, investor protection, and performance in emerging markets. *Journal of Corporate Finance, 10*(5), 703-728.

Klein, A. (2002a). Audit committee, board of director characteristics, and earnings management. *Journal of accounting and economics, 33*(3), 375-400.

Klein, A. (2002b). Economic determinants of audit committee independence. *Accounting Review, 77*(2), 435-452.

Klettner, A., Clarke, T., & Boersma, M. (2014). The Governance of Corporate Sustainability: Empirical Insights into the Development, Leadership and Implementation of Responsible Business Strategy. *Journal of Business Ethics, 122*(1), 145-165.

Koch-Bayram, I. F., & Wernicke, G. (2018). Drilled to obey? Ex-military CEOs and financial misconduct. *Strategic Management Journal, 39*(11), 2943-2964.

Kolk, A. (2008). Sustainability, accountability and corporate governance: exploring multinationals' reporting practices. *Business Strategy and the Environment, 17*(1), 1-15.

Kouwenberg, R., & Phunnarungsi, V. (2013). Corporate governance, violations and market reactions. *Pacific-Basin Finance Journal, 21*(1), 881-898.

Krishnan, G. V., Raman, K. K., Yang, K., & Yu, W. (2011). CFO/CEO-board social ties, Sarbanes-Oxley, and earnings management. *Accounting Horizons, 25*(3), 537-557.

Krishnan, G. V., & Visvanathan, G. (2008). Does the SOX Definition of an Accounting Expert Matter? The Association between Audit Committee Directors' Accounting Expertise and Accounting Conservatism*. *Contemporary Accounting Research, 25*(3), 827-858.

Kroszner, R. S., & Stratmann, T. (1998). Interest-group competition and the organization of congress: theory and evidence from financial services' political action committees. *American Economic Review*, 1163-1187.

La Porta, R., Lopez-de-Silane, F., Shleifer, A., & Vishny, R. W. (1996). Law and finance. *Journal of Political Econmy* , 106(6), 1113-1155.

La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate Ownership around the World. *Journal of Finance*, 471-517.

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1997). Legal determinants of external finance. *Journal of Finance*, 1131-1150.

Law, K. K., & Mills, L. F. (2017). Military experience and corporate tax avoidance. *Review of Accounting Studies, 22*(1), 141-184.

Lawton, T., McGuire, S., & Rajwani, T. (2013). Corporate political activity: A literature review and research agenda. *International Journal of Management Reviews, 15*(1), 86-105.

Le, Q. V., & Zak, P. J. (2006). Political risk and capital flight. *Journal of International Money and Finance, 25*(2), 308-329.

Lester, R. H., Hillman, A., Zardkoohi, A., & Cannella Jr, A. A. (2008). Former government officials as outside directors: The role of human and social capital. *Academy of Management Journal, 51*(5), 999-1013.

Leung, S., Richardson, G., & Jaggi, B. (2014). Corporate board and board committee independence, firm performance, and family ownership concentration: An analysis based on Hong Kong firms. *Journal of Contemporary Accounting & Economics, 10*(1), 16-31.

Leuz, C., Nanda, D., & Wysocki, P. D. (2003). Earnings management and investor protection: an international comparison. *Journal of Financial Economics, 69*(3), 505-527.

Li, F. (2016). Endogeneity in CEO power : a survey and experiment. *Investment Analysts Journal, 45*(3), 149-162.

Li, H., Wu, X., Ye, Y., & Zeng, Q. (2018). Venture capitalists' value-enhancing activities under weak protection of law. *Pacific-Basin Finance Journal, 50*, 26-40.

Liang, Q., Xu, P., & Jiraporn, P. (2013). Board characteristics and Chinese bank performance. *Journal of Banking & Finance, 37*(8), 2953-2968.

Lin, J. W., & Hwang, M. I. (2010). Audit quality, corporate governance, and earnings management: A meta-analysis. *International Journal of Auditing, 14*(1), 57-77.

Lin, X., Li, A., Zhang, P., & Chen, W. (2023). The disciplinary role of product market competition on cash holding. *International Review of Economics & Finance, 83*, 653-671.

Ling, L., Zhou, X., Liang, Q., Song, P., & Zeng, H. (2016). Political connections, overinvestments and firm performance: Evidence from Chinese listed real estate firms. *Finance Research Letters, 18*, 328-333.

Lins, K. V. (2003). Equity ownership and firm value in emerging markets. *Journal of Financial and Quantitative Analysis, 38*(1), 159-184.

Liu, Y., Miletkov, M. K., Wei, Z., & Yang, T. (2015). Board independence and firm performance in China. *Journal of Corporate Finance, 30*, 223-244.

Lovell, J. P. (1967). The military and political change in Asia. *Pacific Affairs, 40*(1/2), 113-123.

Luechinger, S., & Moser, C. (2014). The value of the revolving door: Political appointees and the stock market. *Journal of Public Economics, 119*, 93-107.

Lux, S., Crook, T. R., & Woehr, D. J. (2011). Mixing business with politics: A meta-analysis of the antecedents and outcomes of corporate political activity. *Journal of Management, 37*(1), 223-247.

Martin, G., Campbell, J. T., & Gomez-Mejia, L. (2016). Family control, socioemotional wealth and earnings management in publicly traded firms. *Journal of Business Ethics, 133*(3), 453-469.

McCain, K. W. (1990). Mapping authors in intellectual space: A technical overview. *Journal of the American Society for Information Science, 41*(6), 433-443.

McCain, K. W. (1991). Mapping economics through the journal literature: An experiment in journal cocitation analysis. *Journal of the American Society for Information Science, 42*(4), 290-296.

McCargo, D. (2005). Network monarchy and legitimacy crises in Thailand. *The Pacific Review, 18*(4), 499-519.

Merigó, J. M., & Yang, J. B. (2017). Accounting research: A bibliometric analysis. *Australian Accounting Review, 27*(1), 71-100.

Micco, A., Panizza, U., & Yanez, M. (2007). Bank ownership and performance. Does politics matter? *Journal of Banking & Finance, 31*(1), 219-241.

Michelon, G., & Parbonetti, A. (2012). The effect of corporate governance on sustainability disclosure. *Journal of Management & Governance, 16*, 477-509.

Millstein, I. M., & MacAvoy, P. W. (1998). The active board of directors and performance of the large publicly traded corporation. *Columbia Law Review*, 1283-1322.

Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2010). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. *International Journal of Surgery, 8*(5), 336-341.

Mongeon, P., & Paul-Hus, A. (2016). The journal coverage of Web of Science and Scopus: a comparative analysis. *Scientometrics, 106*(1), 213-228.

Morck, R., Shleifer, A., & Vishny, R. W. (1988). Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics, 20*, 293-315.

Morell, D. (2020). The Political Dynamics of Military Power in Thailand. In The Armed Forces in Contemporary Asian Societies (pp. 138-152). Routledge.

Myers, J. N., Myers, L. A., & Skinner, D. J. (2007). Earnings momentum and earnings management. *Journal of Accounting, Auditing & Finance, 22*(2), 249-284.

Naknoi, K. (2020). *The Thai Military As a Business Group, 1940-2016*. (No. 2019-14). Center for Economic Institutions, Institute of Economic Research, Hitotsubashi University.

Nasr, V. (2004). Military rule, Islamism and democracy in Pakistan. *The Middle East Journal, 58*(2), 195-209.

Nawaz, T., Haniffa, R., & Hudaib, M. (2023). From boots to suits: do military directors protect shareholders' wealth?. *Review of Quantitative Finance and Accounting*, 1-33.

Nerur, S., Rasheed, A. A., & Pandey, A. (2016). Citation footprints on the sands of time: An analysis of idea migrations in strategic management. *Strategic Management Journal, 37*(6), 1065-1084.

Nerur, S. P., Rasheed, A. A., & Natarajan, V. (2008). The intellectual structure of the strategic management field: An author co-citation analysis. *Strategic Management Journal, 29*(3), 319-336.

Neville, F., Byron, K., Post, C., & Ward, A. (2019). Board independence and corporate misconduct: A cross-national meta-analysis. *Journal of Management, 45*(6), 2538-2569.

O'Connor, M., & Rafferty, M. (2012). Corporate governance and innovation. *Journal of Financial and Quantitative Analysis, 47*(2), 397-413.

Papangkorn, S., Chatjuthamard, P., Jiraporn, P., & Chueykamhang, S. (2021). Female directors and firm performance: Evidence from the Great Recession. *International Review of Finance*, 21(2), 598-610.

Park, Y. W., & Shin, H.-H. (2004). Board composition and earnings management in Canada. *Journal of Corporate Finance, 10*(3), 431-457.

Pascual-Fuster, B., & Crespí-Cladera, R. (2018). Politicians in the boardroom: Is it a convenient burden? *Corporate Governance: An International Review, 26*(6), 448-470.

Pathmanand, U. (2008). A different coup d'état? *Journal of Contemporary Asia, 38*(1), 124-142.

Pathmanand, U., & Connors, M. K. (2019). Thailand's Public Secret: Military Wealth and the State. *Journal of Contemporary Asia*, 1-25.

Pearce, J. A., & Zahra, S. A. (1992). Board Composition From A Strategic Contingency Perspective. *Journal of Management Studies, 29*(4), 411-438.

Peasnell, K. V., Pope, P. F., & Young, S. (2005). Board monitoring and earnings management: do outside directors influence abnormal accruals? *Journal of Business Finance & Accounting, 32*(7-8), 1311-1346.

Peng, M. W., Au, K. Y., & Wang, D. Y. (2001). Interlocking directorates as corporate governance in Third World multinationals: Theory and evidence from Thailand. *Asia Pacific Journal of Management, 18*(2), 161-181.

Pfeffer, J., & Salancik, G. (1978). *The extemal control of organizations: A Resource Dependence Perspective*: Harper & Row.

Pfeffer, J., & Salancik, G. R. (2003). *The external control of organizations: A resource dependence perspective*: Stanford University Press.

Phatharathananunth, S. (2008). The Thai Rak Thai party and elections in north-eastern Thailand. *Journal of Contemporary Asia, 38*(1), 106-123.

Pongsudhirak, T. (2008). Thailand since the coup. *Journal of Democracy, 19*(4), 140-153.

Rechner, P. L., & Dalton, D. R. (1991). CEO duality and organizational performance: A longitudinal analysis. *Strategic Management Journal, 12*(2), 155-160.

Ribière, V., & Walter, C. (2013). 10 years of KM theory and practices. *Knowledge Management Research Practice, 11*(1), 4-9.

Richter, B. K., Samphantharak, K., & Timmons, J. F. (2009). Lobbying and taxes. *American Journal of Political Science, 53*(4), 893-909.

Ricks, J. I. (2019). Thailand's 2019 Vote: The General's Election. *Pacific Affairs, 92*(3), 443-457.

Roberts, M. R., & Whited, T. M. (2013). Chapter 7 - Endogeneity in Empirical Corporate Finance1. In G. M. Constantinides, M. Harris, & R. M. Stulz (Eds.), *Handbook of the Economics of Finance* (Vol. 2, pp. 493-572): Elsevier.

Rosenbloom, T. (2011). Traffic light compliance by civilians, soldiers and military officers. *Accident Analysis & Prevention, 43*(6), 2010-2014.

Rosenstein, S., & Wyatt, J. G. (1990). Outside directors, board independence, and shareholder wealth. *Journal of Financial Economics, 26*(2), 175-191.

Ross, S. A. (1973). The economic theory of agency: The principal's problem. *American Economic Review, 63*(2), 134-139.

Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of Accounting and Economics, 42*(3), 335-370.

Ryan, N. (2020). Contract enforcement and productive efficiency: Evidence from the bidding and renegotiation of power contracts in India. *Econometrica, 88*(2), 383-424.

Salvioni, D. M., Gennari, F., & Bosetti, L. (2016). Sustainability and Convergence: The Future of Corporate Governance Systems? *Sustainability, 8*(11), 1203.

Sapra, H., Subramanian, A., & Subramanian, K. V. (2014). Corporate governance and innovation: Theory and evidence. *Journal of Financial and Quantitative Analysis, 49*(4), 957-1003.

Sayalath, S., & Creak, S. (2017). Regime Renewal in Laos: The Tenth Congress of the Lao People's Revolutionary Party. *Southeast Asian Affairs*, 179-200.

Scholes, M., & Williams, J. (1977). Estimating betas from nonsynchronous data. *Journal of Financial Economics, 5*(3), 309-327.

Shaffer, B. (1995). Firm-level responses to government regulation: Theoretical and research approaches. *Journal of Management, 21*(3), 495-514.

Sheng, S., Zhou, K. Z., & Li, J. J. (2011). The effects of business and political ties on firm performance: Evidence from China. *Journal of Marketing, 75*(1), 1-15.

Shleifer, A., & Vishny, R. W. (1986). Large shareholders and corporate control. *Journal of Political Econmy, 94*(3, Part 1), 461-488.

Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *Journal of Finance, 52*(2), 737-783.

Shrivastava, P., & Addas, A. (2014). The impact of corporate governance on sustainability performance. *Journal of Sustainable Finance & Investment, 4*(1), 21-37.

Simpson, J., & Sariol, A. M. (2018). Squared Away: Veterans on the Board of Directors. *Journal of Business Ethics*, 1-11.

Sirivunnabood, P., & Ricks, J. I. (2016). Professionals and soldiers: measuring professionalism in the Thai military. *Pacific Affairs, 89*(1), 7-30.

Sitthipongpanich, T., & Polsiri, P. (2015). Do CEO and board characteristics matter? A study of Thai family firms. *Journal of Family Business Strategy, 6*(2), 119-129.

Small, H. (1973). Co-citation in the scientific literature: A new measure of the relationship between two documents. *Journal of the American Society for Information Science, 24*(4), 265-269.

Sun, P., Hu, H. W., & Hillman, A. J. (2016). The dark side of board political capital: Enabling blockholder rent appropriation. *Academy of Management Journal, 59*(5), 1801-1822.

Suriyapongprapai, T., Chatjuthamard, P., Leemakdej, A., & Treepongkaruna, S. (2022). Stakeholder engagement, military ties, and firm performance. *Corporate Social Responsibility and Environmental Management, 29*(2), 469-479.

Syriopoulos, T., & Tsatsaronis, M. (2012). Corporate governance mechanisms and financial performance: CEO duality in shipping firms. *Eurasian Business Review, 2*(1), 1-30.

Tang, J., Zeng, H., Pang, F., & Huang, L. (2022). Military Political Connection and Firm Value—Empirical Evidence from a Natural Experiment in Thailand. *Emerging Markets Finance and Trade, 58*(7), 1898-1912.

Tee, C. M. (2018). Political connections and the cost of debt: Re-examining the evidence from Malaysia. *Journal of Multinational Financial Management, 46*, 51-62.

Tian, G. Y., & Twite, G. (2011). Corporate governance, external market discipline and firm productivity. *Journal of Corporate Finance, 17*(3), 403-417.

Treepongkaruna, S., Chatjuthamard, P., & Leemakdej, A. (2023). Stock price crash risk and military connected board: Evidence from Thailand. *Plos one*, 18(6), e0281712.

Tuggle, C. S., Sirmon, D. G., Reutzel, C. R., & Bierman, L. (2010). Commanding board of director attention: investigating how organizational performance and CEO duality affect board members' attention to monitoring. *Strategic Management Journal, 31*(9), 946-968.

Vieira, E. S., & Gomes, J. A. (2009). A comparison of Scopus and Web of Science for a typical university. *Scientometrics, 81*(2), 587.

Wang, D. (2006). Founding family ownership and earnings quality. *Journal of Accounting Research, 44*(3), 619-656.

Weisbach, M. S. (1988). Outside directors and CEO turnover. *Journal of Financial Economics, 20*, 431-460.

Westphal, J. D. (1999). Collaboration in the boardroom: Behavioral and performance consequences of CEO-board social ties. *Academy of Management Journal, 42*(1), 7-24.

Westphal, J. D., & Zajac, E. J. (1995). Who shall govern? CEO/board power, demographic similarity, and new director selection. *Administrative Science Quarterly*, 60-83.

Westphal, J. D., & Zajac, E. J. (1998). The symbolic management of stockholders: Corporate governance reforms and shareholder reactions. *Administrative Science Quarterly*, 127-153.

White, H. D., & McCain, K. W. (1998). Visualizing a discipline: An author co-citation analysis of information science, 1972–1995. *Journal of the American Society for Information Science, 49*(4), 327-355.

Wintoki, M. B., Linck, J. S., & Netter, J. M. (2012). Endogeneity and the dynamics of internal corporate governance. *Journal of Financial Economics, 105*(3), 581-606.

Witko, C. (2011). Campaign contributions, access, and government contracting. *Journal of Public Administration Research and Theory, 21*(4), 761-778.

Wiwattanakantang, Y. (2001). Controlling shareholders and corporate value: Evidence from Thailand. *Pacific-Basin Finance Journal, 9*(4), 323-362.

Wong, W.-Y., & Hooy, C.-W. (2018). Do types of political connection affect firm performance differently? *Pacific-Basin Finance Journal, 51*, 297-317.

Xie, B., Davidson, W., & DaDalt, P. J. (2003). Earnings management and corporate governance: the role of the board and the audit committee. *Journal of Corporate Finance, 9*(3), 295-316.

Yarbrough Jr, E., Abebe, M., & Dadanlar, H. (2017). Board political experience and firm internationalization strategy: A resource dependence perspective. *Journal of Strategy and Management, 10*(4), 401-416.

Yeh, Y.-H., Shu, P.-G., & Chiu, S.-B. (2013). Political connections, corporate governance and preferential bank loans. *Pacific-Basin Finance Journal, 21*(1), 1079-1101.

Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics, 40*(2), 185-211.

Yu, Z., Li, J., & Yang, J. (2017). Does corporate governance matter in competitive industries? Evidence from China. *Pacific-Basin Finance Journal, 43*, 238-255.

Zahra, S. A. (1996). Goverance, ownership, and corporate entrepreneurship: The moderating impact of industry technological opportunities. *Academy of Management Journal, 39*(6), 1713-1735.

Zahra, S. A., Neubaum, D. O., & Huse, M. (2000). Entrepreneurship in medium-size companies: Exploring the effects of ownership and governance systems. *Journal of Management, 26*(5), 947-976.

Zahra, S. A., & Pearce, J. A. (1989). Boards of directors and corporate financial performance: A review and integrative model. *Journal of Management, 15*(2), 291-334.

Zang, A. Y. (2012). Evidence on the trade-off between real activities manipulation and accrual-based earnings management. *Accounting Review, 87*(2), 675-703.

Zhang, Z., Zhang, B., & Jia, M. (2022). The military imprint: The effect of executives' military experience on firm pollution and environmental innovation. *The Leadership Quarterly, 33*(2), 101562.

Zheng, C., & Kouwenberg, R. (2019). A Bibliometric Review of Global Research on Corporate Governance and Board Attributes. *Sustainability, 11*(12), 3428.

Zupic, I., & Čater, T. (2015). Bibliometric methods in management and organization. *Organizational Research Methods, 18*(3), 429-472.

APPENDICES

Appendix A: Military Directors' Presence on the Board without Industry Controls

This table presents the robust check for Hypothesis 3.1, using a sample of 1195 firm-level observations from 2006 to 2018. The dependent variable is the dummy variable indicating firms with at least one military director on the board in year *t* (Connection). Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

	(1) 2006-2018	(2) 2006-2018	(3) 2006-2018	(4) 2006-2013	(5) 2015-2018
Constant	-4.45	-8.198**	-10.820***	0.349	-12.407
	(5.35)	(4.16)	(4.10)	(3.68)	(32.34)
GovSales	-1.219			-4.457**	-0.144
	(0.77)			(2.23)	(3.29)
GovOwn	4.196*			5.508**	9.611
	(2.34)			(2.26)	(16.85)
Concentrated		0.414**			
		(0.19)			
CR4			4.744***		
			(1.29)		
Size	-0.004	0.158	0.188	-0.271	0.106
	(0.25)	(0.26)	(0.25)	(0.21)	(1.07)
ROA	0.014	0.015	0.008	0.003	0.01
	(0.02)	(0.02)	(0.02)	(0.02)	(0.12)
Leverage	0.526***	0.460**	0.455**	0.31	1.143
	(0.20)	(0.19)	(0.19)	(0.25)	(1.94)
Growth	0.002	0.002	0.002	-0.001	0.026
	(0.00)	(0.00)	(0.00)	(0.00)	(0.04)
GovStatus	0.284	0.323	0.329	0.556*	
	(0.24)	(0.21)	(0.22)	(0.32)	
No. of Obs.	1195	1195	1195	719	384
Chi-square test	18.54	22.58	29.96	10.85	0.5
p-value	0.0098	0.0009	0	0.1451	0.9979
Pseudo R2	0.070	0.042	0.051	0.099	0.145

Appendix B: Military Directors' Presence on the Board using Military_Percent as Dependent Variable

This table presents the robust check for Hypothesis 3.1, using a sample of 1195 firm-level observations from 2006 to 2018. The dependent variable is the percentage of military directors over the full board in year *t* (*Military_Percent*). Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

	(1)	(2)	(3)	(4)	(5)
Dependent variable	2006-2018	2006-2018	2006-2018	2006-2013	2015-2018
Constant	-0.012	-0.025	-0.031	0.021	-0.056
	(0.04)	(0.04)	(0.04)	(0.05)	(0.06)
GovSales	-0.013			-0.030***	0.002
	(0.01)			(0.01)	(0.01)
GovOwn	0.023**			0.029**	0.041**
	(0.01)			(0.01)	(0.02)
Concentrated		0.001			
		0.00)			
CR4			0.009		
			(0.03)		
Size	0.001	0.001	0.002	-0.001	0.003
	0.00)	0.00)	0.00)	0.00)	0.00)
ROA	0	0	0	0	0
	0.00)	0.00)	0.00)	0.00)	0.00)
Leverage	0.006*	0.006*	0.006*	0.001	0.009*
	0.00)	0.00)	0.00)	0.00)	(0.01)
Growth	0	0	0	0	0
	0.00)	0.00)	0.00)	0.00)	0.00)
GovStatus	0.005*	0.005**	0.005**	0.006	
	0.00)	0.00)	0.00)	0.00)	
Agro & Food	0.003	0.002	0.002	-0.008	0.015
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Industrials	0.009	0.014	0.014	0.007	-0.004
	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)
Property & Construction	0.015	0.012	0.014	0.022*	0.005
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)

	(1)	(2)	(3)	(4)	(5)
Dependent variable	2006-2018	2006-2018	2006-2018	2006-2013	2015-2018
Resources	0.028***	0.027**	0.028**	0.024**	0.023*
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Service	0.025***	0.027***	0.027***	0.018*	0.033**
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
No. of Obs.	1195	1195	1195	719	384
Chi-square test	26.63	21.02	22.44	66.79	24.64
p-value	0.0087	0.0331	0.011	0	0.010
R-square	0.023	0.028	0.028	0.005	0.017

Appendix C: Collinearity Statistics for Study on Military Directors' Presence and Appointment

The presented table shows collinearity statistics for the regression models in Tables 3.6 and 3.9. The first column exhibits the collinearity diagnosis for the panel regression introduced in Table 3.6, while the second column displays the collinearity diagnosis for the regression introduced in Table 3.9.

Collinearity Statistics

	(1) **VIF**	(2) **VIF**
GovSales	1.28	
GovOwn	1.57	
GovFirm		1.33
Concentration	1.26	1.32
Size	1.6	1.22
ROA	1.06	2.2
Leverage	1.01	1.87
Growth	1.03	1.14
BooktoMarket	1.42	1.63
Block	1.53	1.36
GovStatus	1.59	1.29
Agro & Food	2.49	
Industrials	2.78	
Property & Construction	2.44	
Resources	3.59	
Service	2.45	

Appendix D: Internal Governance Effectiveness and Firm Performance without Industry Controls

This table presents the robust check for Hypothesis 4.1, using a sample of 1197 firm-level observations from 2006 to 2018. The dependent variables are Return on Assets (ROA), Tobin's Q, and Return on Equity (ROE). Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

	(1)	(2)	(3)
Dependent variables	ROA	Tobin's Q	ROE
Constant	18.063***	1.760**	2.697
	(4.37)	(0.82)	(10.93)
BoardInd	0.235	0.933***	-6.438
	(1.69)	(0.35)	(4.28)
NoDuality	-0.1	-0.138	0.654
	(0.59)	(0.09)	(1.14)
BoardMeet	-0.076	-0.020*	-0.307*
	(0.06)	(0.01)	(0.17)
BoardSize	0.112	-0.019	0.463*
	(0.10)	(0.02)	(0.26)
Control	2.462**	-0.137	8.417***
	(1.23)	(0.17)	(3.16)
Family	0.199	0.422**	-2.448
	(1.07)	(0.18)	(2.63)
Gov	-0.755	0.125	-10.096***
	(1.26)	(0.17)	(3.83)
Size	-0.896***	-0.02	0.273
	(0.26)	(0.05)	(0.61)
Leverage	-0.489***	-0.037	-1.976*
	(0.18)	(0.03)	(1.07)
Slack	11.357**	3.111***	12.374
	(4.82)	(0.90)	(8.48)
PPE	2.581*	0.07	2.384
	(1.35)	(0.26)	(3.08)

	(1)	(2)	(3)
Dependent variables	ROA	Tobin's Q	ROE
Loss	-3.403***	-0.156***	-11.246***
	(0.93)	(0.05)	(2.62)
Growth	0.023***	0.001*	0.075***
	(0.01)	(0.00)	(0.02)
GovStatus	-0.829**	-0.117**	-2.334***
	(0.33)	(0.06)	(0.80)
No. of Obs.	1397	1397	1397
Chi-square test	97.5	42.7	82.39
p-value	0.000	0.000	0.000
R-square	0.218	0.162	0.179

Appendix E: Collinearity Statistics for Study on Internal Governance Effectiveness

The presented table shows collinearity statistics for the regression models in Tables 4.3 and 4.4. The first column exhibits the collinearity diagnosis for the panel regression introduced in Table 4.3, while the second column displays the collinearity diagnosis for the regression introduced in Table 4.4. The third column displays the collinearity diagnosis for the updated regression introduced in Table 4.5.

	(1) VIF	(2) VIF	(3) VIF
BoardInd	1.24	5.14	4.15
NoDuality	1.18	4.42	
Concentration		8	7.85
BoardInd*Concentration		11.28	9.92
NoDuality*Concentration		4.42	
BoardMeet	1.52	1.56	1.54
BoardSize	1.51	1.62	1.62
Control	2.35	2.82	2.82
Family	2.95	3.54	3.53
Gov	2.54	2.97	2.93
Size	1.82	1.95	1.94
Leverage	1.34	1.4	1.39
Slack	1.26	1.36	1.35
PPE	1.2	1.44	1.43
Loss	1.11	1.15	1.14
Growth	1.04	1.06	1.05
GovStatus	1.05	1.08	1.07
Agro & Food		1.93	1.83
Industrials		1.83	1.8
Property & Construction		3.23	3.2
Resources		2.8	2.76
Service		3.14	3.09

Appendix F: Robust Check for Internal Governance Effectiveness and Firm Performance

This table presents the robust check for the result presented in Table 4.4, using a sample of 1197 firm-level observations from 2006 to 2018. Results omit the variable *NoDuality* as well as the interaction effect between *NoDuality* and *Concentration*/*CR4*. Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variables	ROA	Tobin's Q	ROE	ROA	Tobin's Q	ROE
Constant	22.635***	1.789*	16.773	22.717***	2.283**	20.276
	(5.33)	(0.93)	(13.78)	(5.27)	(0.93)	(14.19)
BoardInd	-5.246	0.847	-16.938*	-17.225**	-0.416	-46.574**
	(3.97)	(0.71)	(9.11)	(7.30)	(1.29)	(18.31)
Concentration	-0.27	0.06	-1.261			
	(0.61)	(0.07)	(1.28)			
CR4				-1.794	-0.632	-10.148
				(4.40)	(0.72)	(9.66)
BoardInd*Concentration	2.534	0.024	6.253*			
	-1.69	-0.24	(3.69)			
BoardInd*CR4				26.040**	1.987	64.157**
				(10.89)	(1.91)	(26.19)
BoardMeet	-0.043	-0.017	-0.2	-0.043	-0.018	-0.2
	-0.07	-0.01	(0.16)	(0.07)	(0.01)	(0.16)
BoardSize	0.167	-0.025	0.728**	0.158	-0.024	0.717**
	(0.11)	(0.02)	(0.30)	(0.12)	(0.02)	(0.30)
Control	1.982	-0.025	7.184**	1.902	-0.018	7.016**
	(1.27)	(0.20)	(3.05)	(1.29)	(0.20)	(3.09)
Family	0.542	0.278	-1.35	0.6	0.279	-1.264
	(1.06)	(0.20)	(2.69)	(1.08)	(0.20)	(2.71)
Gov	-0.371	-0.07	-8.245**	-0.382	-0.041	-8.276**
	(1.39)	(0.18)	(4.12)	(1.39)	(0.19)	(4.10)
Size	-1.098***	-0.038	-0.534	-1.088***	-0.036	-0.528
	(0.34)	(0.06)	(0.79)	(0.33)	(0.05)	(0.78)
Leverage	-0.516**	-0.021	-2.077	-0.502**	-0.02	-2.044
	(0.25)	(0.04)	(1.48)	(0.25)	(0.04)	(1.47)

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variables	ROA	Tobin's Q	ROE	ROA	Tobin's Q	ROE
Slack	15.524***	3.779***	18.612*	15.404***	3.795***	18.321*
	(5.43)	(0.96)	(9.97)	(5.42)	(0.97)	(9.94)
PPE	3.156**	0.06	5.816*	3.019**	0.107	5.558
	(1.49)	(0.26)	(3.46)	(1.45)	(0.25)	(3.48)
Loss	-3.483***	-0.164***	-10.159***	-3.402***	-0.169***	-10.023***
	(0.99)	(0.06)	(2.70)	(0.97)	(0.06)	(2.68)
Growth	0.023***	0.001	0.081***	0.023***	0.001	0.081***
	(0.01)	0.00	(0.02)	(0.01)	0.00	(0.02)
GovStatus	-0.953**	-0.133**	-2.377***	-0.908**	-0.144**	-2.258***
	(0.38)	(0.07)	(0.86)	(0.39)	(0.06)	(0.86)
Agro & Food	-1.232	0.533	-4.45	-0.755	0.563	-3.786
	(1.60)	(0.35)	(3.49)	(1.57)	(0.34)	(3.43)
Industrials	-4.481***	-0.422*	-11.795***	-4.040**	-0.464**	-11.041***
	(1.59)	(0.22)	(3.88)	(1.59)	(0.22)	(3.85)
Property & Construction	-1.044	-0.07	-2.024	0.178	-0.104	-0.129
	(1.55)	(0.24)	(3.63)	(1.77)	(0.27)	(3.85)
Resources	-2.623	-0.089	-5.445	-2.166	-0.042	-4.85
	(1.64)	(0.23)	(4.27)	(1.62)	(0.22)	(4.28)
Service	-1.572	0.699**	-4.23	-1.354	0.673**	-3.814
	(1.51)	(0.28)	(3.48)	(1.49)	(0.27)	(3.43)
No. of Obs.	1197	1197	1197	1197	1197	1197
Chi-square test	93.7	81.73	82.12	104.49	81.9	82.74
p-value	0.00	0.00	0.00	0.00	0.00	0.00
R-square	0.219	0.267	0.210	0.211	0.259	0.202

Appendix G: Internal Governance Effectiveness and Firm Performance with Standardized Coefficient

This table presents the estimation results for Hypothesis 4.2 with the standardized coefficient of two variables, *BoardInd*, and *Concentration*, using a sample of 1197 firm-level observations from 2006 to 2018. Firms in the consumer product industry are merged with those in the service industry, as there are only four companies in the consumer product industry for the entire sample period. Technology Industry is omitted as default. Column 1 displays the original regression result presented in Table 4.4. Column 2 displays the regression result with the standardized coefficient. Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variables	ROA	Tobin's Q	ROE	ROA	Tobin's Q	ROE
Constant	22.075***	2.168**	13.026	21.517***	2.120**	12.37
	(5.34)	(0.92)	(13.54)	(5.20)	(0.90)	(13.31)
BoardInd	-0.001	0.122**	-0.547	-0.008	0.122**	-0.584
	(0.25)	(0.05)	(0.58)	(0.25)	(0.05)	(0.58)
Concentration	0.593	0.088	0.678			
	(0.49)	(0.07)	(0.97)			
CR4				0.959	-0.012	1.381
				(0.61)	(0.08)	(1.16)
BoardInd*Concentration	0.455	0.004	1.123*			
	(0.30)	(0.04)	(0.66)			
BoardInd*CR4				0.607**	0.046	1.496**
				(0.25)	(0.04)	(0.61)
BoardMeet	-0.043	-0.017	-0.2	-0.043	-0.018	-0.2
	(0.07)	(0.01)	(0.16)	(0.07)	(0.01)	(0.16)
BoardSize	0.167	-0.025	0.728**	0.158	-0.024	0.717**
	(0.11)	(0.02)	(0.30)	(0.12)	(0.02)	(0.30)
Control	1.982	-0.025	7.184**	1.902	-0.018	7.016**
	(1.27)	(0.20)	(3.05)	(1.29)	(0.20)	(3.09)
Family	0.542	0.278	-1.35	0.6	0.279	-1.264
	(1.06)	(0.20)	(2.69)	(1.08)	(0.20)	(2.71)
Gov	-0.371	-0.07	-8.245**	-0.382	-0.041	-8.276**
	(1.39)	(0.18)	(4.12)	(1.39)	(0.19)	(4.10)

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variables	ROA	Tobin's Q	ROE	ROA	Tobin's Q	ROE
Size	-1.098***	-0.038	-0.534	-1.088***	-0.036	-0.528
	(0.34)	(0.06)	(0.79)	(0.33)	(0.05)	(0.78)
Slack	15.524***	3.779***	18.612*	15.404***	3.795***	18.321*
	(5.43)	(0.96)	(9.97)	(5.42)	(0.97)	(9.94)
PPE	3.156**	0.06	5.816*	3.019**	0.107	5.558
	(1.49)	(0.26)	(3.46)	(1.45)	(0.25)	(3.48)
Loss	-3.483***	-0.164***	-10.159***	-3.402***	-0.169***	-10.023***
	(0.99)	(0.06)	(2.70)	(0.97)	(0.06)	(2.68)
Growth	0.023***	0.001	0.081***	0.023***	0.001	0.081***
	(0.01)	0.00)	(0.02)	(0.01)	0.00)	(0.02)
GovStatus	-0.953**	-0.133**	-2.377***	-0.908**	-0.144**	-2.258***
	(0.38)	(0.07)	(0.86)	(0.39)	(0.06)	(0.86)
Agro & Food	-1.232	0.533	-4.45	-0.755	0.563	-3.786
	(1.60)	(0.35)	(3.49)	(1.57)	(0.34)	(3.43)
Industrials	-4.481***	-0.422*	-11.795***	-4.040**	-0.464**	-11.041***
	(1.59)	(0.22)	(3.88)	(1.59)	(0.22)	(3.85)
Property & Construction	-1.044	-0.07	-2.024	0.178	-0.104	-0.129
	(1.55)	(0.24)	(3.63)	(1.77)	(0.27)	(3.85)
Resources	-2.623	-0.089	-5.445	-2.166	-0.042	-4.85
	(1.64)	(0.23)	(4.27)	(1.62)	(0.22)	(4.28)
Service	-1.572	0.699**	-4.23	-1.354	0.673**	-3.814
	(1.51)	(0.28)	(3.48)	(1.49)	(0.27)	(3.43)
No. of Obs.	1197	1197	1197	1197	1197	1197
Chi-square test	93.7	81.73	82.12	104.49	81.9	82.74
p-value	0.000	0.000	0.000	0.000	0.000	0.000
R-square	0.219	0.267	0.210	0.211	0.259	0.202

Appendix H: Robust Check for Internal Governance Effectiveness and Firm Performance without Industry Controls

This table presents the robust check for the result presented in Table 4.4, using a sample of 1197 firm-level observations from 2006 to 2018. Results in columns 1 to 3 omit the variable NoDuality as well as the interaction effect between NoDuality and Concentration/CR4. Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variables	ROA	Tobin's Q	ROE	ROA	Tobin's Q	ROE
Constant	21.590***	2.181**	13.292	22.654***	2.429***	18.662
	(5.39)	(0.96)	(13.92)	(5.24)	(0.93)	(14.17)
BoardInd	-5.38	0.823	-17.097*	-17.038**	-0.412	-46.279**
	(3.91)	(0.71)	(9.13)	(7.45)	(1.33)	(18.77)
Concentration	-0.266	0.05	-1.174			
	(0.60)	(0.07)	(1.27)			
CR4				-2.806	-0.29	-12.252
				(3.93)	(0.63)	(9.26)
BoardInd*Concentration	2.579	0.039	6.290*			
	(1.70)	(0.24)	(3.73)			
BoardInd*CR4				25.680**	1.993	63.561**
				(11.13)	(1.98)	(26.82)
BoardMeet	-0.046	-0.019	-0.204	-0.048	-0.019	-0.211
	(0.07)	(0.01)	(0.17)	(0.07)	(0.01)	(0.17)
BoardSize	0.14	-0.016	0.647**	0.132	-0.017	0.641**
	(0.11)	(0.02)	(0.31)	(0.11)	(0.02)	(0.31)
Control	2.104	-0.083	7.468**	1.861	-0.086	7.058**
	(1.38)	(0.21)	(3.26)	(1.37)	(0.21)	(3.27)
Family	0.495	0.371*	-1.623	0.675	0.377*	-1.334
	(1.16)	(0.21)	(2.83)	(1.14)	(0.21)	(2.81)
Gov	-1.038	-0.034	-9.861**	-0.98	-0.012	-9.741**
	(1.46)	(0.19)	(4.15)	(1.45)	(0.19)	(4.14)
Size	-1.105***	-0.059	-0.481	-1.075***	-0.055	-0.439
	(0.34)	(0.06)	(0.79)	(0.33)	(0.06)	(0.77)
Leverage	-0.490*	-0.022	-1.993	-0.484*	-0.02	-1.979
	(0.25)	(0.04)	(1.46)	(0.25)	(0.04)	(1.45)
Slack	15.656***	3.936***	18.875*	15.404***	3.937***	18.424*
	(5.44)	(0.99)	(10.02)	(5.42)	(0.99)	(9.95)
PPE	2.352	0.026	3.415	2.23	0.042	3.301
	(1.51)	(0.26)	(3.60)	(1.50)	(0.26)	(3.67)

	(1)	(2)	(3)	(4)	(5)	(6)
Dependent variables	ROA	Tobin's Q	ROE	ROA	Tobin's Q	ROE
Loss	-3.537***	-0.173***	-10.312***	-3.492***	-0.175***	-10.244***
	(0.99)	(0.06)	(2.75)	(0.98)	(0.06)	(2.74)
Growth	0.023***	0.001	0.081***	0.023***	0.001	0.082***
	(0.01)	(0.00)	(0.02)	(0.01)	(0.00)	(0.02)
GovStatus	-0.933**	-0.123*	-2.297***	-0.912**	-0.127**	-2.234**
	(0.38)	(0.07)	(0.88)	(0.38)	(0.06)	(0.87)
No. of Obs.	1397	1397	1397	1397	1397	1397
Chi-square test	123.34	82.35	89.92	99.14	44.36	80.11
p-value	0.000	0.000	0.000	0.000	0.000	0.000
R-square	0.239	0.247	0.194	0.223	0.161	0.176

Appendix I: Moderating Effect of Military Director Appointment Without Industry Controls

This table presents the estimation results for Hypothesis 4.4 without control for industry, using a sample of 1197 firm-level observations from 2006 to 2018. The dependent variables are Return on Assets (ROA), Tobin's Q, and Return on Equity (ROE). Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
	ROA	Tobin's Q	ROE	ROA	Tobin's Q	ROE
Constant	20.514***	2.124**	9.812	19.862***	2.105**	9.041
	(5.19)	(0.97)	(13.35)	(5.15)	(0.98)	(13.36)
Military	1.067	-0.159	0.76			
	(1.12)	(0.12)	(2.44)			
GovFirm	2.293**	0.074	3.93	2.271**	0.118	4.038
	(1.10)	(0.15)	(2.45)	(1.09)	(0.15)	(2.48)
Military*GovFrim	-2.782*	-0.011	-3.213			
	(1.49)	(0.19)	(3.15)			
Military_Percent				7.881	-0.351	5.391
				(7.04)	(1.12)	(14.33)
Military_Percent*GovFirm				-21.043**	-1.418	-28.2
				(10.19)	(1.60)	(21.90)
BoardMeet	-0.057	-0.019	-0.234	-0.055	-0.018	-0.228
	(0.07)	(0.01)	(0.17)	(0.07)	(0.01)	(0.17)
BoardSize	0.145	-0.02	0.708**	0.146	-0.022	0.708**
	(0.11)	(0.02)	(0.31)	(0.11)	(0.02)	(0.31)
Control	1.824	-0.085	6.992**	1.745	-0.107	6.811**
	(1.30)	(0.20)	(3.11)	(1.30)	(0.20)	(3.10)
Family	0.742	0.373*	-1.139	0.793	0.386**	-1.033
	(1.09)	(0.19)	(2.68)	(1.09)	(0.19)	(2.66)
Gov	-1.098	-0.051	-9.903**	-1.444	-0.097	-10.315**
	(1.49)	(0.19)	(4.26)	(1.49)	(0.19)	(4.20)
Size	-1.104***	-0.031	-0.565	-1.063***	-0.029	-0.516

	(1)	(2)	(3)	(4)	(5)	(6)
	ROA	Tobin's Q	ROE	ROA	Tobin's Q	ROE
	(0.33)	(0.06)	(0.77)	(0.33)	(0.06)	(0.77)
Leverage	-0.566**	-0.023	-2.073	-0.569**	-0.027	-2.073
	(0.26)	(0.04)	(1.41)	(0.26)	(0.04)	(1.43)
Slack	15.298***	4.053***	17.630*	15.317***	4.069***	17.732*
	(5.36)	(1.02)	(9.91)	(5.35)	(1.01)	(9.89)
PPE	2.478*	0.063	3.59	2.559*	0.053	3.648
	(1.50)	(0.27)	(3.55)	(1.50)	(0.27)	(3.54)
Loss	-3.456***	-0.168***	-10.179***	-3.481***	-0.167***	-10.204***
	(0.98)	(0.06)	(2.77)	(0.98)	(0.06)	(2.77)
Growth	0.023***	0.001	0.082***	0.023***	0.001	0.082***
	(0.01)	(0.00)	(0.02)	(0.01)	(0.00)	(0.02)
GovStatus	-0.965***	-0.134**	-2.274***	-0.983***	-0.134**	-2.274***
	(0.37)	(0.07)	(0.87)	(0.37)	(0.07)	(0.87)
No. of Obs.	1197	1197	1197	1197	1197	1197
Chi-square test	76.00	47.94	68.93	75.73	45.64	70.31
p-value	0.000	0.000	0.000	0.000	0.000	0.000
R-square	0.208	0.203	0.191	0.211	0.203	0.191

Appendix J: Moderating effect of military directors with standardized coefficients

This table presents the estimation results for Hypothesis 4.4 with the standardized coefficient of three variables, *Military*, *Military_Percent*, and *GovFirm*, using a sample of 1197 firm-level observations from 2006 to 2018. Firms in the consumer product industry are merged with those in the service industry, as there are only four companies in the consumer product industry for the entire sample period. Technology Industry is omitted as default. The dependent variables are Return on Assets (ROA), Tobin's Q, and Return on Equity (ROE). Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
	ROA	Tobin's Q	ROE	ROA	Tobin's Q	ROE
Constant	21.922***	1.795*	13.638	21.502***	1.761*	13.109
	(5.34)	(0.94)	(13.41)	(5.32)	(0.95)	(13.41)
Military	1.107	-0.155	0.806			
	(1.12)	(0.12)	(2.44)			
GovFirm	2.330**	0.103	3.544	1.833*	0.109	3.06
	(1.11)	(0.16)	(2.46)	(1.02)	(0.15)	(2.33)
Military*GovFrim	-2.648*	-0.031	-2.711			
	(1.49)	(0.19)	(3.18)			
Military_Percent				0.4	-0.016	0.217
				(0.37)	(0.05)	(0.76)
Military_Percent*GovFirm				-0.993*	-0.086	-1.136
				(0.53)	(0.08)	(1.18)
BoardMeet	-0.053	-0.018	-0.226	-0.052	-0.017	-0.223
	(0.07)	(0.01)	(0.17)	(0.07)	(0.01)	(0.17)
BoardSize	0.172	-0.029	0.788**	0.173	-0.03	0.788**
	(0.11)	(0.02)	(0.31)	(0.11)	(0.02)	(0.31)
Control	1.629	-0.033	6.579**	1.559	-0.058	6.438**
	(1.22)	(0.19)	(2.95)	(1.23)	(0.20)	(2.96)

	(1) ROA	(2) Tobin's Q	(3) ROE	(4) ROA	(5) Tobin's Q	(6) ROE
Family	0.829	0.285	-0.832	0.877	0.3	-0.749
	(1.01)	(0.18)	(2.57)	(1.01)	(0.19)	(2.56)
Gov	-0.419	-0.081	-8.223*	-0.748	-0.134	-8.545**
	(1.41)	(0.18)	(4.21)	(1.42)	(0.18)	(4.18)
Size	-1.100***	-0.014	-0.606	-1.062***	-0.011	-0.566
	(0.33)	(0.06)	(0.77)	(0.33)	(0.06)	(0.77)
Leverage	-0.593**	-0.022	-2.157	-0.593**	-0.026	-2.148
	(0.25)	(0.04)	(1.43)	(0.25)	(0.04)	(1.45)
Slack	15.142***	3.892***	17.366*	15.141***	3.905***	17.429*
	(5.35)	(0.99)	(9.87)	(5.35)	(0.99)	(9.86)
PPE	3.184**	0.092	5.792*	3.240**	0.079	5.812*
	(1.51)	(0.27)	(3.47)	(1.51)	(0.27)	(3.46)
Loss	-3.399***	-0.158***	-10.019***	-3.425***	-0.157***	-10.050***
	(0.98)	(0.06)	(2.71)	(0.98)	(0.06)	(2.72)
Growth	0.023***	0.001	0.082***	0.023***	0.001	0.082***
	(0.01)	(0.00)	(0.02)	(0.01)	(0.00)	(0.02)
GovStatus	-0.983***	-0.145**	-2.338***	-1.001***	-0.146**	-2.338***
	(0.37)	(0.07)	(0.85)	(0.37)	(0.07)	(0.85)
Agro & Food	-0.796	0.565*	-3.887	-0.806	0.568*	-3.886
	(1.48)	(0.34)	(3.29)	(1.48)	(0.34)	(3.28)
Industrials	-4.553***	-0.408**	-11.970***	-4.510***	-0.408**	-11.911***
	(1.55)	(0.20)	(3.87)	(1.54)	(0.20)	(3.88)
Property & Construction	-1.567	-0.092	-2.977	-1.615	-0.102	-3.02
	(1.43)	(0.22)	(3.44)	(1.42)	(0.22)	(3.44)
Resources	-2.945*	-0.064	-6.233	-2.850*	-0.05	-6.075
	(1.64)	(0.22)	(4.33)	(1.64)	(0.22)	(4.37)
Service	-1.917	0.689***	-4.808	-1.877	0.693***	-4.714
	(1.46)	(0.27)	(3.42)	(1.45)	(0.26)	(3.42)
No. of Obs.	1197	1197	1197	1197	1197	1197
Chi-square test	92.75	83.7	81.34	92.1	85.07	81.8

	(1) ROA	(2) Tobin's Q	(3) ROE	(4) ROA	(5) Tobin's Q	(6) ROE
p-value	0.000	0.000	0.000	0.000	0.000	0.000
R-square	0.224	0.275	0.210	0.226	0.276	0.211

Appendix K: Robust Check for Military Connection and Earnings Quality

This table presents the estimation results for Hypothesis 4.5 with the winsorized earnings management measures, using a sample of 1197 firm-level observations from 2006 to 2018. Due to a lack of pertinent data, companies in the financial business are excluded. Since there are only four companies in the consumer goods industry over the whole sample period, those businesses are combined with those in the service sector. Technology Industry is omitted as default. The dependent variables are winsorized earnings management measures. The first type is real earnings management (REM): abnormal operating cash flow (ABN_CFO), abnormal production costs (ABN_PRO), and abnormal discretionary expenses (ABN_EXP). The likelihood of REM is indicated by the more negative values of ABN_CFO and ABN_EXP and the more positive value of ABN_PRO. The second type is accrual-based earnings management (AEM), measured by the total accruals (ABS_ACC) and discretionary accruals (ABS_DA). Both AEM measures take the absolute value, and the higher value indicates the possibility of AEM. Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

	(1)	(2)	(3)	(4)	(5)
	ABN_CFO	ABN_EXP	ABN_PRO	ABS_DA	ABS_ACC
	-	-	+	+	+
Constant	0.1	0.318***	-0.561***	0.309***	0.246***
	(0.08)	(0.05)	(0.12)	(0.06)	(0.04)
Military	0.030***	-0.012	0.005	0.006	0.002
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Booktomarket	-0.006	0.004	-0.013	0.006	-0.002
	(0.01)	(0.00)	(0.01)	(0.01)	(0.00)
Loss	0.021*	-0.002	-0.01	0.01	0.018**
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
ROA	0.006***	0	-0.006***	0.001	0
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Size	-0.003	-0.017***	0.029***	-0.014***	-0.011***
	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)
Leverage	-0.005	-0.007	0.006	0	-0.001
	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)

	(1) ABN_CFO -	(2) ABN_EXP -	(3) ABN_PRO +	(4) ABS_DA +	(5) ABS_ACC +
Growth	-0.001***	0	0	-0.000*	0
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
FF_Dummy	-0.003	0.003	-0.009	0.02	-0.01
	(0.02)	(0.01)	(0.03)	(0.01)	(0.01)
FF_Own	0.018	0.014	-0.036	-0.021	-0.006
	(0.03)	(0.02)	(0.04)	(0.02)	(0.01)
GovStatus	-0.009	-0.003	0	-0.025***	-0.006**
	(0.01)	(0.00)	(0.01)	(0.01)	(0.00)
Agro & Food	-0.041**	0.051	0.05	-0.019**	-0.003
	(0.02)	(0.03)	(0.05)	(0.01)	(0.01)
Industrials	0.007	-0.01	0.087***	0.002	0
	(0.02)	(0.01)	(0.03)	(0.01)	(0.01)
Property & Construction	-0.085***	-0.001	0.023	0.055***	0.016**
	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)
Resources	0	-0.004	-0.033	0.023**	0.005
	(0.02)	(0.02)	(0.03)	(0.01)	(0.01)
Service	0.060***	0.01	-0.04	0.029*	0.013*
	(0.02)	(0.02)	(0.04)	(0.02)	(0.01)
No. of Obs.	1185	1185	1184	1171	1173
Chi-square test	162.34	77.82	86.95	107.81	55.55
p-value	0.000	0.000	0.000	0.000	0.000
R-square	0.3811	0.047	0.1708	0.1039	0.0987

Appendix L: Robust Check for Percentage of military directors on board and earnings quality

This table presents the estimation results for Hypothesis 4.5 with winsorized earnings management measures, using a sample of 1197 firm-level observations from 2006 to 2018. Due to a lack of pertinent data, companies in the financial business are excluded. Since there are only four companies in the consumer goods industry over the whole sample period, those businesses are combined with those in the service sector. Technology Industry is omitted as default. The dependent variables are winsorized earnings management measures. The first type is real earnings management (REM): abnormal operating cash flow (ABN_CFO), abnormal production costs (ABN_PRO), and abnormal discretionary expenses (ABN_EXP). The likelihood of REM is indicated by the more negative values of ABN_CFO and ABN_EXP and the more positive value of ABN_PRO. The second type is accrual-based earnings management (AEM), measured by the total accruals (ABS_ACC) and discretionary accruals (ABS_DA). Both AEM measures take the absolute value, and the higher value indicates the possibility of AEM. Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

	(1)	(2)	(3)	(4)	(5)
	ABN_CFO	ABN_EXP	ABN_PRO	ABS_DA	ABS_ACC
	-	-	+	+	+
Constant	0.091	0.322***	-0.568***	0.307***	0.245***
	(0.08)	(0.05)	(0.12)	(0.06)	(0.04)
Military_Percent	0.195**	-0.007	0.129	0.074	0.021
	(0.10)	(0.06)	(0.09)	(0.07)	(0.04)
Booktomarket	-0.006	0.003	-0.013	0.006	-0.002
	(0.01)	(0.00)	(0.01)	(0.01)	(0.00)
Loss	0.021*	-0.002	-0.01	0.01	0.018**
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
ROA	0.006***	0	-0.006***	0.001	0
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Size	-0.003	-0.017***	0.029***	-0.014***	-0.011***
	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)
Leverage	-0.005	-0.007	0.006	0	-0.001
	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)

	(1) ABN_CFO -	(2) ABN_EXP -	(3) ABN_PRO +	(4) ABS_DA +	(5) ABS_ACC +
Growth	-0.001***	0	0	-0.000*	0
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
FF_Dummy	-0.002	0.003	-0.008	0.02	-0.009
	(0.02)	(0.01)	(0.03)	(0.01)	(0.01)
FF_Own	0.017	0.016	-0.034	-0.021	-0.006
	(0.03)	(0.02)	(0.04)	(0.02)	(0.01)
GovStatus	-0.009	-0.003	0	-0.025***	-0.006**
	(0.01)	(0.00)	(0.01)	(0.01)	(0.00)
Agro & Food	-0.041**	0.052	0.052	-0.019**	-0.003
	(0.02)	(0.03)	(0.05)	(0.01)	(0.01)
Industrials	0.008	-0.009	0.089***	0.003	0
	(0.02)	(0.01)	(0.03)	(0.01)	(0.01)
Property & Construction	-0.085***	0.001	0.025	0.055***	0.016**
	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)
Resources	0.001	-0.004	-0.033	0.024**	0.005
	(0.02)	(0.02)	(0.03)	(0.01)	(0.01)
Service	0.059***	0.012	-0.037	0.030*	0.013*
	(0.02)	(0.02)	(0.04)	(0.02)	(0.01)
No. of Obs.	1185	1185	1184	1171	1173
Chi-square test	149.44	77.03	87.12	108.12	56.08
p-value	0.000	0.000	0.000	0.000	0.000
R-square	0.381	0.047	0.168	0.104	0.099

Appendix M: Two-stage least square instrumental variable analysis of military directors on board and earnings quality

This table presents the two-stage least square instrumental variable analysis for hypothesis 4.5 with winsorized earnings management measures, using a sample of 1197 firm-level observations from 2006 to 2018. Due to a lack of pertinent data, companies in the financial business are excluded. The instrumental variable adopted in the analysis is *EARLEST_MCON*, measured as the percentage of military directors in the earliest year for each firm in the sample. Due to the space limitation, only the second-stage regression result is presented here. Moreover, since there are only four companies in the consumer goods industry over the whole sample period, those businesses are combined with those in the service sector. Technology Industry is omitted as default. The dependent variables are winsorized earnings management measures. The first type is real earnings management (REM): abnormal operating cash flow (ABN_CFO), abnormal production costs (ABN_PRO), and abnormal discretionary expenses (ABN_EXP). The likelihood of REM is indicated by the more negative values of ABN_CFO and ABN_EXP and the more positive value of ABN_PRO. The second type is accrual-based earnings management (AEM), measured by the total accruals (ABS_ACC) and discretionary accruals (ABS_DA). Both AEM measures take the absolute value, and the higher value indicates the possibility of AEM. Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

	(1)	(2)	(3)	(4)	(5)
	ABN_CFO	ABN_EXP	ABN_PRO	ABS_DA	ABS_ACC
	-	-	+	+	+
Constant	0.087	0.314***	-0.593***	0.314***	0.270***
	(0.08)	(0.05)	(0.12)	(0.06)	(0.04)
Military_Percent	0.154	0.113	-0.216	-0.004	0.05
	(0.13)	(0.11)	(0.21)	(0.10)	(0.06)
Booktomarket	-0.006	0.003	-0.014**	0.006	-0.008***
	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)
Loss	0.026*	-0.004	0	0.012	0.027***
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)

	(1)	(2)	(3)	(4)	(5)
	ABN_CFO	ABN_EXP	ABN_PRO	ABS_DA	ABS_ACC
	-	-	+	+	+
ROA	0.007***	0	-0.005***	0.001	0
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Size	-0.003	-0.017***	0.032***	-0.014***	-0.012***
	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)
Leverage	-0.004	-0.010***	0.007	0.001	0.001
	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)
Growth	-0.001***	0	0	-0.000**	0
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
FF_Dummy	0.001	0.003	-0.015	0.022	-0.008
	(0.02)	(0.01)	(0.03)	(0.02)	(0.01)
FF_Own	0.013	0.012	-0.055	-0.027	-0.016
	(0.03)	(0.02)	(0.05)	(0.02)	(0.01)
GovStatus	-0.011*	-0.005	0	-0.026***	-0.008**
	(0.01)	(0.00)	(0.01)	(0.01)	(0.00)
Agro & Food	-0.043*	0.054**	0.044	-0.02	0
	(0.02)	(0.02)	(0.04)	(0.02)	(0.01)
Industrials	0.008	-0.007	0.080**	0.002	0.009
	(0.02)	(0.02)	(0.03)	(0.02)	(0.01)
Property & Construction	-0.087***	0.003	0.01	0.056***	0.024***
	(0.02)	(0.02)	(0.03)	(0.01)	(0.01)
Resources	0.003	-0.004	-0.045	0.024*	0.007
	(0.02)	(0.02)	(0.03)	(0.01)	(0.01)
Service	0.061***	0.015	-0.053	0.030**	0.015*
	(0.02)	(0.02)	(0.03)	(0.01)	(0.01)
No. of Obs.	1185	1185	1184	1171	1173
Chi-square test	227.02	112.07	124.12	101.12	92.48
p-value	0.000	0.000	0.000	0.000	0.000
First-Stage F-test	774.6***	220.54***	615.08***	1107.52***	984.90***
R-square	0.374	0.036	0.151	0.103	0.101

Appendix N: Robust Check for Military director's audit committee membership and earnings quality

This table presents the estimation results for Hypothesis 4.7 with winsorized earnings management measures, using a sample of 1197 firm-level observations from 2006 to 2018. Due to a lack of pertinent data, companies in the financial business are excluded. Since there are only four companies in the consumer goods industry over the whole sample period, those businesses are combined with those in the service sector. Technology Industry is omitted as default. The dependent variables are winsorized earnings management measures. The first type is real earnings management (REM): abnormal operating cash flow (ABN_CFO), abnormal production costs (ABN_PRO), and abnormal discretionary expenses (ABN_EXP). The likelihood of REM is indicated by the more negative values of ABN_CFO and ABN_EXP and the more positive value of ABN_PRO. The second type is accrual-based earnings management (AEM), measured by the total accruals (ABS_ACC) and discretionary accruals (ABS_DA). Both AEM measures take the absolute value, and the higher value indicates the possibility of AEM. Robust standard errors are applied in all specifications. Standard errors are shown in brackets. Coefficients significantly different from zero at a significant level of 10%, 5%, and 1% are marked *, **, and ***, respectively.

	(1)	(2)	(3)	(4)	(5)
	ABN_CFO	ABN_EXP	ABN_PRO	ABS_DA	ABS_ACC
	-	-	+	+	+
Constant	0.081	0.327***	-0.566***	0.310***	0.246***
	(0.08)	(0.06)	(0.12)	(0.06)	(0.04)
MilitaryAC	0.027*	-0.008	0.001	-0.005	-0.001
	(0.01)	(0.01)	(0.02)	(0.01)	(0.00)
Booktomarket	-0.005	0.003	-0.013	0.006	-0.002
	(0.01)	(0.00)	(0.01)	(0.01)	(0.00)
Loss	0.022*	-0.002	-0.01	0.01	0.018**
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)
ROA	0.006***	0	-0.006***	0.001	0
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
Size	-0.002	-0.017***	0.029***	-0.014***	-0.011***
	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)

	(1)	(2)	(3)	(4)	(5)
	ABN_CFO	ABN_EXP	ABN_PRO	ABS_DA	ABS_ACC
	-	-	+	+	+
Leverage	-0.004	-0.007	0.006	0.001	-0.001
	(0.00)	(0.01)	(0.01)	(0.00)	(0.00)
Growth	-0.001***	0	0	-0.000*	0
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
FF_Dummy	-0.006	0.004	-0.009	0.019	-0.01
	(0.02)	(0.01)	(0.03)	(0.01)	(0.01)
FF_Own	0.018	0.014	-0.036	-0.022	-0.007
	(0.03)	(0.02)	(0.04)	(0.02)	(0.01)
GovStatus	-0.009	-0.003	0	-0.024***	-0.006**
	(0.01)	(0.00)	(0.01)	(0.01)	(0.00)
Agro & Food	-0.041**	0.051	0.05	-0.020**	-0.004
	(0.02)	(0.03)	(0.05)	(0.01)	(0.01)
Industrials	0.007	-0.01	0.087***	0.002	0
	(0.02)	(0.01)	(0.03)	(0.01)	(0.01)
Property & Construction	-0.086***	0	0.023	0.053***	0.015**
	(0.02)	(0.01)	(0.02)	(0.01)	(0.01)
Resources	0.001	-0.004	-0.033	0.023**	0.004
	(0.02)	(0.02)	(0.03)	(0.01)	(0.01)
Service	0.057***	0.011	-0.04	0.027*	0.012*
	(0.02)	(0.02)	(0.04)	(0.02)	(0.01)
No. of Obs.	1185	1185	1184	1171	1173
Chi-square test	142.84	80.93	89.11	108.69	55.55
p-value	0.000	0.000	0.000	0.000	0.000
R-square	0.380	0.046	0.170	0.103	0.097