School of Accounting

Three Essays on Corporate Governance, Accounting Conservatism and Corporate Financial Decisions

Jubran Alqahtani

This thesis is presented for the degree of
Doctor of Philosophy
of
Curtin University

June 2020

Declaration

To the best of my knowledge and belief this thesis contains no material previously published by any other person except where due acknowledgment has been made.

This thesis contains no material which has been accepted for the award of any other degree or diploma in any university.

Jubran Alqahtani

Signature:.....

Date:.....

Abstract

This thesis comprises three essays that examine corporate governance, accounting conservatism and corporate financial decisions of member countries of the Gulf Cooperation Council (GCC). Oil exportation has allowed the GCC economy to flourish because it attracts major foreign capital, which has made the GCC a significant global partner over the past decade. This new position of the GCC in the global economy has triggered the need for reforms in corporate governance practices. Deep knowledge about corporate governance mechanisms in the GCC region is lacking because corporate governance systems and practices are in developmental stages. This thesis contributes to the literature by providing empirical insights on various aspects of corporate governance, accounting conservatism and financial decisions in GCC countries. The first essay provides evidence of the importance of accounting conservatism in Saudi Arabia by examining the effect of members of the ruling family in the boardroom. That study provides insights on how corporate governance reforms in 2010 have promoted a new business climate and bolstered investor confidence within the Saudi Arabian economy. The second essay examines the impact of family control on corporate cash holdings across firms' life cycles in the GCC region. The third essay investigates the influence of busy board directors on firms' financial decisions across their life cycle in the GCC region. These three essays provide knowledge of corporate governance and its association with accounting conservatism and corporate financial decisions in developing economies in the GCC region.

The first chapter of this thesis provides information on the economic background of the GCC region. The GCC economies range from developing markets with extensive family and ruling-family control to open-door economies with reformed corporate governance mechanisms. The economies in the GCC region are also diversifying from reliance on oil and gas exportation to other productive economic sectors. In addition, this chapter presents the motivation for the study, a summary of the findings, and the contributions to the literature.

The second chapter of this thesis, entitled "Political Connections, Regulatory Changes and Accounting Conservatism", examines the effect of directors from the ruling family on accounting conservatism. The study uses 724 observations of non-financial firms listed on the Saudi Stock Exchange (Tadawul) during 2007–2015. It is found that firms with ruling-family directors on the board have less conservative accounting practices. However, this

effect is negated after changes in 2010 when compliance with corporate governance regulations became mandatory for listed firms.

The third chapter of this thesis, entitled "Family Control, Firm Life Cycle and Corporate Cash Holdings", investigates the relationship between family control and corporate cash holdings over a sample of publicly listed GCC firms from 2006 to 2016. Findings show that family-controlled firms have a lower level of cash holdings relative to their non-family-controlled counterparts; tend to reduce cash holdings in the growth, mature and shakeout stages of a firm's life cycle; and increase their capital expenditure in the mature stage. Cash holdings are reduced when the family is the founder, a family member is involved in management, or a family member is a director on the company board.

The fourth chapter of this thesis, entitled "Multiple Directorships, Firm Life Cycle and Corporate Financial Decisions", investigates the influence of directors with multiple outside board directorships on corporate financial decisions using a sample of GCC non-financial listed firms during 2006–2016. That study also investigates how this relationship evolves over different stages of a firm life cycle. It is found that, when the number of directors with multiple board seats increases, firms' level of cash holdings rises; capital expenditure declines; selling, general and administrative (SG&A) expenses increase, and firm performance decreases. The study further concludes that the presence of busy directors increases cash holdings in the introduction, maturity and shakeout stages. Firms thus spend less capital expenditure in the maturity and shakeout stages. In addition, firms incur high SG&A expenses in the introduction and growth stages, and firm performance diminishes in the introduction, growth, and maturity stages.

The final chapter concludes the thesis and outlines directions for future research.

Acknowledgements

First and foremost, I am exceedingly grateful to the almighty Allah, most gracious and merciful, who has helped me to complete this dissertation successfully. My deepest appreciation and gratitude goes to my PhD supervisor Professor Grantley Taylor and co-supervisor Dr Lien Duong for their belief in me and their continuous support, excellent guidance and motivation throughout my PhD journey at Curtin University. Their sound advice, encouragement, constructive feedback and patience undoubtedly resulted in significant contributions to the development of this thesis. It is my pleasure to know all of them.

My deepest gratitude goes to my dearest parents for their unconditional love, faith, never-ending support, patience, and understanding throughout my PhD journey. Thanks to my faithful wife, who had been very patient despite her desire for my attention, and my three children (Abdulmajeed, Abdulmalik and Salem) for their patience and understanding. This work could not have been possible without their love and constant support.

In general, my thanks are extended to the Curtin University for giving me the opportunity to gain knowledge through the organised workshops and courses that greatly assist in my research works. Special thanks go to my chairperson Dr Harj Singh for his wonderful support and Dr Muammer Wali for managing access to databases. Also, I would like to thank to Jenny Goodison, administrative officer, FBL HDR Unit, for her continuous support. I am also grateful to the Head of School of Accounting, Professor Saurav Dutta for his support. I am thankful to Dr Fay Rola-Rubzen, Dr Effiezal Abdul Wahab, Dr Nigar Sultana, Dr Baban Eulaiwi, Dr Shahadat Hossain, Dr Desmond Tutu, Dr Yeut Hong Tham and Dr Imran Haider for many helpful pieces of advice and suggestions.

I would also like to thank all the participants of the conference and discussants at the different conferences at which I have presented: The Accounting & Finance Association of Australia and New Zealand (AFAANZ) Conference, Brisbane, 2019; the Accounting & Finance Association of Australia and New Zealand (AFAANZ) Doctoral Symposium, Auckland, New Zealand, 2018.

Furthermore, I would like to thank the Saudi Arabia government, Ministry of Higher Education and express my intense appreciation to the Najran University for providing me with scholarship to finance my doctoral studies in Australia.

Last but not least, my gratitude goes to my close friends and colleagues Faisal Alsalhi, Mohammed Asiri, Mohammed Alqahtani, Abdulaziz Alqahtani, Abdulaziz Alabeedi, Muteeb Alahmari, Omar Alotaibi, Ariful Islam, Borak Ali, Abdullah Alqahtani, Nahidul Islam, Meshal Aldaham, Abdullah Al-Harbi, Zuel Fakar Ali, Majed, Talal Al-Harbi, Abdullah Hadadi, Zaid Matar, and Ayoob Alyafai for their company, humour and laughter they brought during hard times on the PhD journey. Finally, I do feel I owe an apology to anyone who helped, supported and encouraged me to complete my PhD but whom I have forgotten to acknowledge here, as a result of inflated ego or poor memory.

Dedication

I dedicate this effort to my caring father, my great mother, my brothers, my patient wife, my children and to all my family members back in Saudi Arabia.

Publications Arising from this Research

Referred Conference Articles

Alqahtani, J., Taylor, G., Duong, L. and Alsalhi F. (2019). Ruling Family Members in The Boardroom and Accounting Conservatism. AFAANZ Conference, 7-9 July 2019, Brisbane, Australia.

Alqahtani, J., Taylor, G., and Duong, L. (2020). Family Control, Firm Life Cycle and Corporate Cash Holdings. Forthcoming presentation at AFAANZ Online Conference, 6-8 July 2020.

Journal Submission

Alqahtani, J., Taylor, G., Duong, L. and Eulaiwi, B. I. (2020). Multiple Directorships, Firm Life Cycle and Corporate Financial Decisions: Evidence from the GCC Countries. *Emerging Markets Review*.

(Currently under review, submission No. EMEMAR_2020_334). (ABDC: A).

Table of Contents

List of Tables

List of Appendices

List of Figures

List of Abbreviations

AFAANZ	Accounting and Finance Association in Australia and New Zealand
BAH	The State of Bahrain
CMA	The Capital Market Authority
GCC	Gulf Cooperation Council Countries
GDP	Gross Domestic Product
GMM	Generalised Method of Moments Estimation
G20	The Group of Twenty
Hawkamah	Institute of corporate governance for the Middle East and North Africa
KSA	Kingdom of Saudi Arabia
KUW	The State of Kuwait
MENA	Middle East and North African
OLS	Ordinary Least Squares
OMN	Sultanate of Oman
OPEC	Organisation of Petroleum Exporting Countries
PSM	Propensity Score Matching
QAT	The State of Qatar
S&P	Standard & Poor's Capital IQ Database
Tadawul	The Saudi Stock Exchange
UAE	United Arab Emirates
2SLS	Two-Stage Least Square

Chapter One

1

Introduction

1.1 Background of the Study

This thesis examines three cases; initially, the effect of ruling family directors on accounting conservatism using 724 observations of non-financial firms listed on the Saudi Stock Exchange. Secondly, the effect of family control on corporate cash holdings across various stages of a firm's life cycle using a large sample of publicly listed Gulf Cooperation Council (GCC) firms. Finally, the influence of directors with multiple outside board directorships on corporate financial decision making with reference to firm life cycle stages, using a sample of non-financial listed firms from the GCC. Saudi Arabia is selected for this investigation of accounting conservatism because of the peculiar interdependence of royal and old merchant families and their geopolitical influence on economic and financial related matters in the capital market within the State (Mazaheri, 2013). Furthermore, changes in regulation in corporate governance in 2010 which enforced compliance by listed firms with corporate governance regulations distinguishing Saudi Arabia from other countries in the GCC region. This mandatory compliance for corporate governance legislature provides a more transparent economy than other countries in the GCC region also eliminating the influence of monarchy on economic and financial matters within the state, hence making Saudi Arabia a suitable subject to investigate accounting conservatism as opposed to other GCC countries.

The countries of the Gulf Cooperation Council (GCC) are a subset of developing markets, which are typically smaller, less liquid and less integrated than developed markets (Bley & Saad, 2012). Since the 1970s, GCC governments have played an active role in their countries' economic development processes through adopting open-door economic policies. These policies have helped diversify countries' economies from dependence on oil and gas exploration to include other productive economic sectors (Fasano & Iqbal, 2003). These countries have also recently increased their investments in domestic markets through their sovereign wealth funds. Other factors that notably contribute to the uniqueness of these countries' economies are the absence of corporate and personal taxes. This climate has attracted the attention of foreign investors targeting higher returns and promotes diversification in these emerging markets (Bley & Chen, 2006). In addition, the political systems of most GCC countries are noted for their closed systems of political governance, which are based on hereditary monarchy. These monarchical family systems have allowed governance, institutions and economic systems that differ from those in most countries to emerge in this oil-rich region (Mazaheri, 2013). The GCC countries follow civil law and are characterised by weak capital markets and

high insider shareholdings (Agha & Eulaiwi, 2020). Moreover, corporate governance mechanisms in GCC countries are in the early stages of development. Thus, compliance with corporate governance codes is not always mandatory in some member states (Agha & Eulaiwi, 2020; Hawkamah, 2010). In addition, disclosure requirements are not well defined in the governance codes of these countries (Hawkamah, 2010).

Saudi Arabia, which forms the main context of the first essay, has reached a higher economic standing. It became a member of the G20 in 2008 and its emerging stock market represents approximately 44% of total Middle East Arab market capitalisation. In addition, Saudi Arabia provides one-quarter of the total Gross Domestic Product (GDP) in the GCC region (Hearn, Piesse, & Strange, 2011). Saudi Arabia remains one of the largest global oil producers and is a major stakeholder in the Organisation of Petroleum Exporting Countries (OPEC). It controls approximately 30% of total OPEC production, and holds an estimated 25% of global oil reserves (Baydoun, William, Neal, & Roger, 2013; Hamdi, Aloui, Alqahtani, & Tiwari, 2019; OPEC, 2012). The country has progressed toward liberalising its economy to attract direct foreign investment by adopting strategic financial, political, social and economic reforms that have contributed to the foundation of a "new business climate" (Belloumi & Alshehry, 2018; Luciani, Aarts, & Nonnemann, 2005; Mazaheri, 2013). In an effort to diversify the economy through private-sector participation, the Saudi government has progressively undertaken various regulatory reforms to eliminate corruption, nepotism and cronyism, and to promote transparency and accountability (Moshashai, Leber, & Savage, 2018). These recent reforms have been recognised by two significant market indices: the Emerging Markets Index of Morgan Stanley Capital International (MSCI) and FTSE Russell's Emerging Market Index (Alnori & Alqahtani, 2019). The inclusion of the Saudi capital market in these two indices highlights opportunities for capital-market investments and market confidence in the country, which are particularly required by foreign institutional and individual investors (Matt, 2019). This crucial milestone affirms the country's efforts toward diversifying its economy, which aligns with the government's Vision 2030 development trajectory (Moshashai et al., 2018).

Further, the economic and social connections between the Saudi monarchy and rich trading families further consolidate the royal family's influence over government and commercial organisations (Mazaheri, 2013). Generally, members of the royal family have the power to bypass legal and regulatory requirements within the corporate governance and financial reporting structures. Thus, the protection provided by politically connected directors encourages management to act in the interest of these individuals to the detriment

of the quality and transparency of firms' financial reports (Al-Hadi, Taylor, & Al-Yahyaee, 2016). This phenomenon is applicable to all GCC countries, however, in Saudi Arabia due to legislature changes in 2010, there has been a significant shift from the norm and cooperate governance regulations are now being applied, hence there is significantly more transparency in Saudi listed firms than in other countries in the GCC region. Therefore, this thesis investigates accounting conservatism in Saudi Arabia.

In addition, the control that royal-family directors exert over firms in which they are major shareholders affects the ownership–management separation required by law (Mazaheri, 2013). This may push ruling-family firms to raise capital domestically because the level of transparency associated with foreign financing requires greater accounting conservatism (Leuz & Oberholzer-Gee, 2006). In general, several factors determine financial policies within firms. One important factor is family control within the firm. Prior literature shows that major financial decisions within firms differ between family-controlled and non-family-controlled firms (Hu, Wang, & Zhang, 2007). Several factors make Saudi Arabia an important research context within the GCC region to examine the effect of political connections and the different phases of corporate governance and regulatory changes on accounting conservatism.

In the GCC region, almost 80% of firms are family controlled, and these firms represent 60% of the capital market (Halawi & Davidson, 2008). For example, family-controlled firms are responsible for more than 90% of the GCC's non-oil wealth. Arguably, family members who control firms can exploit minority shareholders and use a firm's cash holdings to fund self-serving ventures (Kuan, Li, & Chu, 2011; Liu, Luo, & Tian, 2015). Prior literature suggests that, compared with family-controlled firms, non-family-controlled firms are constrained, especially in emerging markets. This is due to family-controlled firms being able to mitigate agency conflicts between managers and shareholders (Kuan, Li, & Liu, 2012; Wang & Shailer, 2017). There is an inverse relationship between family control and cash-holding levels within firms; family controllers reduce cash holdings because accumulation of cash may attract hostile takeovers or may persuade ambitious shareholders to disrupt family influence on firms' operations (Anderson & Reeb, 2004). When family members form part of the executive management or corporate board of a firm, corporate cash flows within the firm may be affected, especially when family connections determine access to important corporate resources. In the GCC region, information asymmetry and moral hazard are negated by including family members in a firm's management structure (Fama & Jensen, 1983;

Richardson, 2006). Therefore, my study argues that the reduction of cash holding by family controllers is channelled towards enhancing investment portfolio. Hence, these cash reductions are applied towards achieving future profits for the firm. Furthermore, the behaviour of family controllers is examined through various life cycle stages of the firm as well as quantile regression to show various cash levels.

The capital markets in GCC countries differ from those in many countries in terms of the higher proportion of "busy director" appointments in major listed firms (Al-Musalli & Ismail, 2012; Eulaiwi et al., 2016). The limited resources (time and effort) of busy directors keep them from playing an important role in board activities, which eventually contributes to poorer corporate governance practices and corporate financial decisions (Chou & Feng, 2019; Jiraporn, Davidson, DaDalt, & Ning, 2009). Further, the time factor can adversely affect the efficiency of directors regarding activities for control of internal management (Morck, Shleifer, & Vishny, 1988). The equity markets of GCC countries have grown significantly due to the increasing number of listed firms.

To consolidate recent progress toward economic diversification in the GCC countries, high-quality financial statements are essential to promote growth in capital markets and boost the confidence of investors in the region. Moreover, the significant interdependence between members of the royal family and old merchant families in Saudi Arabia, which is embedded within the geopolitical dynamics and the business environment, needs empirical investigation. In addition, the high proportions of family-controlled firms and appointed directors with multiple directorships in the GCC region require further empirical investigation.

As noted, high-quality financial information is important for attracting international investors for rapid growth in a country's capital market. However, weaknesses in corporate governance practices create leeway for CEOs to manipulate the decision-making process to reap personal benefits at the expense of stakeholders. Hence, investigating issues of accounting conservatism in Saudi Arabia and the impact of board busyness and family control on financial decisions in GCC countries remains important and timely.

1.2 The Motivation for the Thesis

The motivation to conduct this research was influenced by several factors. First, Saudi Arabia represents an ideal setting in which to investigate the association between directors with political connections and conservative accounting because many listed firms in this country have at least one member of the royal family on corporate boards (Al-Hadi et al.,

2016). The impact of political connections on the deployment of conservative accounting policies and practices thus warrants further investigation. This is especially relevant in Saudi Arabia, which recently implemented new corporate governance regulations with the aim of building a new business climate and creating investor confidence. Prior literature suggests that accounting conservativism is crucial for achieving effective corporate governance practices (Chi, Liu, & Wang, 2009; Ahmed & Duellman, 2007). The argument for the requirement of conservatism in capital markets roots in the fact that conservative accounting enhances confidence of lenders towards potential borrowers because of improved level of transparency(Holthausen and Watts, 2001; Watts, 2003), monitoring of managers and contracts is carried out effectively and there is an improved reliability in financial statements (Watts, 2003; Ball and Shivakumar, 2005; Basu, 2005). This would in effect open the economy to increased local and international investment because of improved cooperate governance mechanisms (Beekes, Pope and Young, 2004; Ahmed and Duellman, 2007). However, in the case of firms with political or ruling family connections the effectiveness of conservative accounting policies may come under scrutiny because of antiquated agency problems ((Johnson and Mitton, 2003; Faccio, 2006; Gul, 2006). Although, Baloria (2015) would argue that political connections may carry as much weight as accounting conservatism in the opinion of creditors as their political backing may stand in as a form of guarantee to debtors. Essentially, he argues that political connection is a form of legal tender. Politically connected firms may be privy to lower tax, lower litigation, and more favourable bank loans (Tang et al., 2013; Houston et al., 2014; Faccio, 2010).

I argue that political connectedness may undermine the effectiveness of corporate governance structures by raising agency costs, which could impede the use of conservative accounting practices. Thus, the first essay investigates whether ruling-family directors in boardrooms affect accounting conservatism in Saudi Arabian listed firms.

Second, the motivation to examine the determinants of cash holdings of family-controlled firms in emerging markets in GCC countries (the second essay) is influenced by the GCC setting, which demonstrates a unique locus of agency conflicts. These agency conflicts may arise between majority and minority shareholders because majority shareholders retain cash in order to pursue private interests to the detriment of minority shareholders (Faccio, Lang, & Young, 2010; Liu et al., 2015). Moreover, conflicts between managers and shareholders in GCC firms may affect a firm's cash-holding policy, but research in this area is scant. Thus, the second essay investigates the influence of family control on cash retention, specifically whether family control can reduce cash holdings, which may mitigate agency conflicts.

Economic theory suggests that the board of directors is an important element of the governance structure of a corporation by serving two key functions: advisory and monitoring functions (Adams, Hermalin, & Weisbach, 2010). The advisory function requires that directors use their expertise to counsel management in establishing and implementing new and potentially risky strategic initiatives. Agency theory argues that the monitoring function of directors of a given firm is influenced by directors' busyness (Falato, Kadyrzhanova, & Lel, 2014; Fich & Shivdasani, 2006). This influence relates to time limitations imposed by directors holding many outside board seats, which in turn can lead to difficulties in directors' satisfying their legally assigned responsibilities. Consequently, several state agencies with responsibility for promoting corporate governance within the GCC region have highlighted the risks associated with directors holding too many directorships (e.g. Council for Institutional Investors, 1998; The National Investor, 2008). However, the literature is less clear on the effect of busy directors on corporate value, particularly within the context of emerging markets. Therefore, the motivation for the third study was to examine the effect of multiple directorships on corporate financial decisions of publicly listed firms in GCC countries such as cash holdings, capital expenditure, selling, general, and administrative (SG&A) expenses and firm performance.

Third, the influence of board of directors on corporate strategy is impossible to overlook within the GCC context due to its distinctiveness (e.g. economic systems, political systems, institutional systems). The literature previously focused on two aspects of corporate boards – board size and board composition – but the issue of board directors who hold multiple directorships ("busy directors") is increasingly researched. The effect of busy directors remains unexplored in emerging markets such as those of GCC countries. Prior literature shows that board directors who hold many outside board seats can reduce firm performance (Jiraporn, Kim, & Davidson, 2008) and decrease the effectiveness of outside board members as monitors (Core, Holthausen, & Larcker, 1999). Busy board directors can also weaken corporate governance (Jiraporn et al., 2009), increase the tendency for financial-statement fraud (Beasley, 1996), give CEOs opportunities to increase their remuneration (Andres & Lehmann, 2010), and affect financing choices and efficiency of firms (Gilson, 1990). In addition, directors with too many directorships diminish investor confidence and creditor trust and may lead to higher agency costs (Cooper & Uzun, 2012; Core et al., 1999).

1.3 Summary of Findings and Contribution to the Literature

The three essays contribute to theory and practice in several ways.

The first essay provide evidence that Saudi Arabian firms with ruling-family directors on their board practise less accounting conservatism. This effect is negated following regulatory changes in 2010 when compliance with corporate governance regulations became mandatory for publicly listed firms. These findings support the notion that powerful board members can influence the accounting practices of firms. This essay contributes to the literature on factors that determine accounting conservatism and is relevant for emerging and newly developed economies. The essay makes an incremental contribution to the literature beyond Chaney, Faccio, & Parsley (2011) by highlighting that a decrease of 1.644 basis points in accounting conservatism in the period before 2010 is related to one standard deviation variation in the existence of ruling-family board members. This finding supports the notion that politically connected firms in Saudi Arabia adopt less conservative accounting practices until it becomes mandatory in 2010 for listed firms to comply with corporate governance regulations. This empirical study also offers a methodological contribution by drawing on three accounting conservatism proxies – an accrual-based proxy, a market-based proxy, and a proxy of asymmetric timeliness of earnings – to offer new insight on the influence of political connectedness on accounting conservatism practices. The results remain robust to different measures of political connectedness: the proportion of royal-family directors on the board, and whether the chairperson is a member of the royal family. Finally, contextualising the understanding of accounting conservatism practices within Saudi Arabia offers opportunities to extend prior research by generalising the findings to other settings within the GCC region with similar geopolitical dynamics.

The second essay provides evidence that family-controlled firms have a lower level of cash holdings than their non-family-controlled counterparts. Firms tend to reduce cash holdings in the growth, mature and shakeout stages of a firm's life cycle and to increase their capital expenditure in the mature stage. This essay contributes to theory and practice and extends the literature in two ways. First, the study contributes to existing knowledge on the influence of family control on firms' cash holdings. The study use various measures of family control and thus makes a methodological contribution to determining the influence of family control on firms' cash holdings. By using an index of attributes that collectively measures the level of family control, it negates the risks incurred in prior studies that relied on a single variable to assess the strength of family control. Second, the study opposes the literature on the precautionary motive for holding cash, which mitigates

risks of market fluctuations and other unforeseen circumstances. For example, family-controlled firms tend to avoid retaining high levels of cash to avert agency conflicts in which managers seek to exploit cash reserves to meet personal objectives.

The third essay finds that firms with directors with multiple directorships have higher cash holdings and SG&A expenses, and that firms with busy directors have significantly lower levels of capital expenditure and firm performance than do other firms. The findings from using a parsimonious life-cycle measure proposed by Dickinson (2011) suggest that the effect of directors' busyness on financial decisions differs significantly across the firm life-cycle stages. Directors' busyness increases cash holdings for firms in the introduction, maturity and shakeout stages, but reduces capital expenditure in the maturity and shake-out stages. Further, the presence of directors with multiple directorships results in high SG&A expenses in the introduction and growth stages, and decreases firm's performance in the introduction, growth and maturity stages. This essay makes several contributions to the literature. First, the essay contributes to the existing literature on multiple directorships, as well as the literature on financial decisions and firm life-cycle stages. The results complement the empirical findings in several recent studies (Ferris, Jagannathan, & Pritchard, 2003; Fich & Shivdasani, 2006; Habib, Bhuiyan, & Hasan, 2018; Hribar & Yehuda, 2015; Jiraporn et al., 2009). Second, my study responds to a call from Huse and Zattoni (2008) for further research on directors and firm life-cycle stages. These authors conducted a case study of three small Norwegian companies and found that the behaviour of board members changed with the stage of the life cycle. They recommended a larger study to confirm and generalise their results. Third, the study has implications for investors and policymakers in GCC countries and other developing countries in which directors of publicly listed firms often hold multiple directorships.

1.4 The Organisation of Chapters

This thesis is organised into five chapters and contains three essays. Chapter 1 outlines the background of the study and the motivation for the study, presents a summary of the findings and the contribution of the three essays, and ends with the organisation of chapters. Chapter 2 presents the first essay entitled "Political Connections, Regulatory Changes and Accounting Conservatism". Chapter 3 presents the second essay entitled "Family Control, Firm Life Cycle and Corporate Cash Holdings". Chapter 4 presents the third essay entitled "Multiple Directorships, Firm Life Cycle and Corporate Financial Decisions". Chapter 5 concludes the thesis, presenting the conclusions of the research, the policy implications and directions for future research.

Chapter Two

2

Political Connections, Regulatory Changes and Accounting Conservatism

2.1 Introduction

In this study I investigate whether ruling family directors[1] in boardrooms have an impact on accounting conservatism using a large sample of Saudi Arabian listed firms. Saudi Arabia is an ideal setting to investigate the association between board directors with political connections and conservative accounting. It has been found that many listed firms in Gulf Cooperation Council (GCC) countries have at least one member of the royal family on corporate boards (Al-Hadi, Taylor, & Al-Yahyaee, 2016; Halawi & Davidson, 2008). The impact of political connections on the employment of conservative accounting policies therefore warrants further investigation (Chaney et al., 2011), especially in Saudi Arabia which recently implemented new governance regulations. Prior studies shows that in order to achieve a good standard of corporate governance in the economy, then accounting conservatism must be applied(Chi, Liu, & Wang, 2009; Lafond & Roychowdhury, 2008; Ahmed & Duellman, 2007). The main effect of accounting conservatism is seen in the improvements in level of financial reporting required by firms depicting improved transparency by firm's management (Ball & Shivakumar, 2005; Basu, 2005; Watts, 2003; Ball, Kothari, & Robin, 2000). Accounting conservatism is also advantageous in terms of confidence requirement for loan application because improved transparency enables lenders access risk better and allow them to fund loans more confidently (Holthausen and Watts, 2001; Watts, 2003). Previous study by Baloria (2015) argues that political connectedness may not hamper lender confidence and postulates instead that connectedness acts to improve lender confidence as connections are a form of guarantee. However, my study seeks to explain how political connectedness (i.e., ruling family) may undermine the effectiveness of corporate governance structures by raising agency costs which could impede the use of conservative accounting practices (Mohammed, Ahmed, & Ji, 2017; Bushman & Piotroski, 2006; Faccio, 2006). [2]

Investigating the issue of accounting conservatism in Saudi Arabian context is unique and important due to the embeddedness of the ruling family within national, institutional and economic systems. That embeddedness facilitates the ruling family intervention in corporate decision making including the appointment of board members (Hussainey & Al-Nodel, 2008). Prior literature argues that high-quality financial statements are essential to

[1] A variety of terms are used to describe political connections in the GCC, including Saudi Arabia (monarchy, sheikhs, royal family, kings, and 'the 10 big families'), all referring to the families who hold political and business power and have the influence to affect decision-making (Halawi & Davidson, 2008).

[2] Faccio (2006) denotes firms with ties to parliaments (MPs), ministers, and politicians that have the power to influence business behavior as politically connected firms.

facilitate stability, boost investor confidence and growth of capital markets, particularly in emerging markets (Ball and Shivakumar 2005). The interdependence of royal family and old merchant associated with the royal family in Saudi Arabia within the geopolitical dynamics of Saudi Arabia makes it contextually unique, to explore how ruling family members influence firms and accounting conservatism practices.

Furthermore, the economic and social connections associated with the monarchy and rich trading families with royal family relations in Saudi Arabia further consolidates their influence over government and commercial organisations (Baydoun et al., 2013; Mazaheri, 2013). Members of the royal family have the power to overcome legal and regulatory requirements within the corporate governance and financial reporting framework. First, protection provided by politically connected directors encourages management teams to act in the interest of these individuals to the detriment of the quality and transparency of firms financial reports (Al-Hadi et al., 2016). For example, managers in politically connected firms have the tendency to compromise conservative accounting practices and exercise more opportunistic behaviour (Al-Hadi et al., 2016; Chaney et al., 2011). Second, control of royal family directors over firms in which they are major shareholders affects the ownership–management separation required by law (Jaggi, Leung, & Gul, 2009; Mazaheri, 2013). For example, when politically connected controlling shareholders have both ownership and management in their hands, the quality of financial reporting including conservative practices loses importance and their interests become the interests of the company (Al-Hadi et al., 2016). Third, it may be in the interest of ruling family firms to raise capital domestically as the levels of transparency associated with foreign financing requires a higher quality of accounting conservatism (Leuz and Oberholzer-Gee 2006). As a result of this politically connected firms prefer to remain opaque in financial reporting in order to benefit at the expense of investors (e.g., Schipper, 1989; Leuz et al.,2003; Chaney et al., 2011). Typically, firms with poor conservative accounting are most likely to establish political connections with the ruling family.

The involvement of officials associated with royal family members in corrupt practices has been recognised (Moshashai et al., 2018; Lyse, 2017). This has been confirmed by recent measures adopted including the arrest and detention of suspected corrupted individuals with support from the Crown Prince Mohammad bin Salman. The recent measures adopted resulted in the recovery of US$106 billion (Lyse, 2017; Moshashai et al., 2018). The commitment of the government to eliminate corruption and promote transparency is expected to boost investor confidence in the Saudi economy (Lyse, 2017).

The study makes an incremental contribution to the literature beyond Chaney et al. (2011) by highlighting that 1.644 basis points decrease in accounting conservatism is related to one standard deviation variation in the existence of ruling family members in the board which support the notion that politically connected firms in Saudi Arabia adopt less conservative accounting practices. This effect is negated following changes in 2010 when it became mandatory for listed firms in Saudi Arabia to comply with corporate governance regulation. In addition, using a sample of 724 firm-year observations over the period 2007–2015, this study provides robust evidence to suggest that politically connected firms – i.e., firms that have at least one member of the royal family on the board of directors – adopt less conservative accounting practices. My empirical model drawing from three accounting conservatism proxies: an accrual-based proxy (Givoly & Hayn, 2000), a market-based proxy (Beaver & Ryan, 2000), and a proxy of asymmetric timeliness of earnings (Basu, 1997) to offer new insight on the influence of political connectedness on accounting conservatism practices. My results remain robust to different measures of political connectedness – the proportion of royal family directors on the board and whether the chairperson comes from the royal family. Additional control variables relating to risk and earnings management, and endogeneity concerns including moderating effect estimation, propensity-score matching (PSM) and two-stage least squares (2SLS) tests were carried out. Finally, contextualising the understanding of accounting conservatism practices within the lens of Saudi Arabia offers opportunities to extend prior research where the findings can be generalised to other settings within the GCC region with similar geopolitical dynamics.

The remainder of this study is as follows. The background of royal family influence in Saudi Arabia is presented followed by the literature review and hypothesis development. The research design, empirical results and discussion are presented in subsequent sections. The research ends with robustness checks for endogeneity and additional tests and conclusion.

2.2 Royal Family Influence in Saudi Arabia

The Capital Market Authority (CMA) has legal authority over the stock market in Saudi Arabia, and its board members and pieces of regulations are determined by royal decree (Alshehri & Solomon, 2012). Though corporate governance regulation exist in Saudi Arabia, it is directed towards the appointment and responsibilities of directors of corporate boards (Al-Hadi et al., 2016). Within the corporate governance framework, there exist some variation as determined by Saudi company law and that of the accompanying

royal decrees (Al-Hadi et al., 2016). For example, Saudi financial reporting standards are released by Saudi Organization for Certified Public Accountants – the government-controlled accounting body formed by royal decree (Al-Shammari, Brown, & Tarca, 2008).

Several major corporations in the capital market have also been established by royal decree including the Saudi Arabian Basic Industries Corporation (SABIC) established in 1976 (Al-Zamil, 1981). In this research, politically connected directors are synonymous with royal family members or directors appointed by royal decree (Mazaheri, 2013; Hertog, 2007). In Saudi Arabia, the appointment of politically connected directors to corporate boards are influenced by royal family interest, or the interest of founding members and large shareholders who are likely to be either royal family members or merchants with royal family association (Al-Hadi et al., 2016; Hertog, 2007). Royal family members typically have significant investment interests in diverse sectors of the economy and industries and their ownership in these sectors and the power associated with the royal family gives them access to other resources including bank loans, social capital etc. (Mazaheri, 2013; Al-Yousef, 2008).

As a result of recent changes in the Saudi Arabian Vision 2030, the government has taken steps to transform the country (Moshashai et al., 2018) to benefit everyone (Nurunnabi, 2018), increasing transparency, eliminating corruption, nepotism and cronyism, and promoting transparency and equal rights. One major goal of Vision 2030 is to recover funds stolen by officials (Moshashai et al., 2018). The government has recognised the involvement of highly placed government officials and royal family members in corrupt practices, manifested in the recent crackdown on perceived corrupt officials by Crown Prince Mohammad bin Salman. A BBC report in November 2017 stated that this action had boosted investor confidence in the Saudi economy (Lyse, 2017). An incident at Ritz-Carlton Riyadh, where some ministers, high placed government officials and royal family members were put in detention at the hotel for allegedly engaging in corruption. This is an illustration of the government's resolve to root out corruption and recover stolen funds.

2.3 Literature Review and Hypotheses Development

The emerging entrenchment and political connection literature offers various perspectives on how firms' political connections affect their decisions, behaviour, and performance (Faccio, 2006; Johnson & Mitton, 2003; Agrawal & Knoeber, 2001; Fisman, 2001). The emergence of political connectedness and its entrenchment in the business

environment, together with religious embeddedness in Saudi Arabia, influences the way in which firms obtain the requisite resources to operate in an efficient manner (Alshehri & Solomon, 2012; Haniffa & Hudaib, 2007; Al–Twaijry, Brierley, & Gwilliam, 2002). These factors and conditions are important considerations in the context of Saudi companies where social and economic structures are dominated by 'familiness', which may translate into political decision-making and cronyism (Mazaheri, 2013).

On the other hand, the resource-based theory argues that companies form political connections because politicians control key resources, and by forming political connections firms can access these resources at a comparatively lower cost than if they were not connected (Wernerfelt, 1984). Mazaheri (2013) asserts that investors in Saudi Arabia are more likely to take an interest in firms that clearly exhibit the influence of the ruling elite because they believe that these connections help ease business transaction costs. The resource-based theory trumps the requirement for excessive transparency in financial reporting by firms which is the main basis of accounting conservatism. Therefore, royal family connectedness may eliminate the requirement for quality financial statements.

2.3.1 Accounting conservatism

In the field of accounting, measuring assets and liabilities is significantly uncertain due to the fact that not all aspects of accounting are clearly and fully covered by accounting standards (Chung, Firth, & Kim, 2003). Thus, managers are able to apply their own discretion in producing accounting estimates, which may be neutral, aggressive or conservative (Saleh, Iskandar, & Rahmat, 2005). Though managers have a better understanding of the implications of the firm's conservative accounting, they may neglect these implications when making financial decisions (Sun & Xu, 2012). The conservative principle, conceptualised on the accounting principle of prudence, was first promulgated by Bliss (1924) to anticipate all losses but recognise no profit. Basu (1997) argues that conservatism is an asymmetric timeliness of earnings, and that recognising good news as gains requires higher verification than recognising bad news as losses. Conservatism has been acknowledged as 'a selection criterion between accounting principles that contributes to the minimisation of cumulative reported profits by faster expense recognition, slower revenue recognition, higher liability valuation and lower asset valuation' (Givoly & Hayn, 2000, p. 292). Ball and Shivakumar (2005) suggest that conservatism is dependent on the relationship between cash flow and accruals-based operations. This approach is praised for its non-dependence on market measures, thus eliminating the risk of abnormalities that may

be caused by market inefficiencies. These varied definitions of conservatism aim to ensure that any earnings reported are understated rather than overstated.

Some studies have argued that conservatism leads to a reduction in agency conflict because it decreases managers' incentives concerning over-payment and enables the detection of negative net present value projects in the early stages (Ball & Shivakumar, 2005; Kwon, Newman, & Suh, 2001). The new levels of transparency and improved financial reporting as a result of conservatism in accounting suggests a more liberal business atmosphere as financial data is full disclosed, up to date and unhampered by influence of political connectedness. Furthermore, the likelihood of managers to make future investments based on forecasting rather than results of firm's expected earnings is eliminated (Ball & Shivakumar, 2005). Conservatism helps to reduce information asymmetry between managers and outside shareholders, and limits managers' opportunistic behaviour (Lafond & Watts, 2008; Chen, Hemmer, & Zhang, 2007; Watts, 2003). Kwon (2005) adds that conservatism can be useful in controlling the cost of sub-optimal managerial decisions when compared to profits measured. Ball and Shivakumar (2005) find that conservative accounting improves the usefulness of financial statements, solves agency problems, and ultimately increases firm value. It has also been argued that accounting principles are commonly employed to reduce agency costs (see Watts & Zimmerman, 1978).

In the context of Saudi Arabia, the principle of conservatism can be effective in decreasing agency conflicts between majority shareholders and minority shareholders that are founded in the dominance of concentrated ownership (Alzharani et al., 2011; Al-Nodel & Hussainey, 2010; Al-Abbas, 2009). Mohammed et al. (2017) suggest that conservative accounting contributes to corporate governance, especially in firms with agency problems between minority and controlling shareholders. However, with the presence of individuals with a superior power whose interests are in line with managerial opportunistic behaviour, accounting conservatism may be impeded. French and Raven's (1959) theory of power identifies five types of power by which individuals exercise control over others: reward power, coercive power, legitimate power, referent power, and expert power. Reward power in a firm occurs when royal directors, for instance, provide or promise to provide less powerful individuals (e.g., top management) with lucrative compensation for opportunistically manipulating financial reports (Albrecht et al., 2015) while shielding them from legal consequences. Coercive power can also be a determining factor for curtailing management's tendency to supress financial statements. Coercive power leans on the valence of threatened punishment i.e., the risk of financial report

manipulation highly outweighs the reward. Hence, managers may be forced to conform to the requirements of royal directors within the firm. Ruling family members use their political power to influence managers and extract company wealth for private benefits (Hussainey & Al-Nodel, 2008). Therefore, I argue that the application of accounting conservatism may be less prevalent in firms with ruling family members on their boards because in many cases political connectedness could stand in for conservatism in terms legitimacy to bolster investor confidence.

2.3.2 Political connection

In the business context, political connection can be defined as ties that a firm or upper management holds with either the state or other politicians who hold authority and power in the decision-making process of a country (Amore & Bennedsen, 2013; Agrawal & Knoeber, 2001). A firm can also be considered politically connected if any director of the board or any executive in the firm is a member of parliament, a municipal council, a high-ranking official in the armed forces, or a member of the state government (Amore & Bennedsen, 2013; Polsiri & Jiraporn, 2012; Chaney et al., 2011; Boubakri, Cosset, & Saffar, 2008; Faccio, 2006). Politically connected firms cans also extent major shareholders with ties to prominent members of the ruling party (Polsiri & Jiraporn, 2012). Earlier studies have demonstrated that companies can benefit by using political ties to improve their financial performance and to limit market entry by competitors (Xu, Yuan, Jiang, & Chan, 2015; Boubakri et al., 2008), by obtaining support to help them survive periods of financial destress, gain favourable credit terms and tax holidays, or benefit from reductions in capital costs (Boubakri, Cosset, & Saffar, 2012; Claessens, Feijen, & Laeven, 2008; Faccio, Masulis, & McConnell, 2006). The presence of ruling family members on a board of directors can be an effective buffer against unfavourable interventions by government to obstruct a firm's expansion (Hertog, 2007).

On the one hand, Chaney et al. (2011) argue that political ties provide a disincentive for being transparent because politically connected members can help protect management in situations where they have not made full disclosure to stakeholders. It can therefore be suggested that firms with political ties may have lower levels of accounting conservatism and transparency compared to firms without such political ties (Mohammed et al., 2017). Firms with political connections may hesitate to increase their accounting conservatism since political connection creates agency conflicts between majority and non-majority shareholders (Schipper, 1989). Al-Hadi et al. (2016) state that directors with political connections or who are members of powerful families often have significant control,

particularly when they have both high equity and strong political ties. Such individuals are able to promote their personal agenda by putting significant pressure on the board to act in their interests at the expense of minority shareholder. The expropriation of private benefits from other shareholders[3] is often achieved by such tactics as fomenting divisions among minority shareholders so they cannot wield their collective power (Randolph & Memili, 2018). Fan and Wong (2002) argue that majority shareholders are also able to conceal their appropriative activities as they control the processes and policies regarding financial reporting.

Members of the ruling family also tended to be key members in the state government apparatus, and thus capable of controlling top positions and centralising decision-making processes (Hertog, 2007). Saudi Arabia is generally characterised by low investor protection, high ownership concentration, and political connections including shareholders who have the power to influence both managers' and minority shareholders' decisions (Al-Matari et al., 2012; Al-Abbas, 2009). Shanthy (2010) notes that shareholders who control cross-shareholding have significant personal interest in serving on firms' boards, from which they have power to access and manipulate financial information. Boubakri, Sattar, and Saffar (2013) provide evidence to suggest that firms with close political ties make less conservative investment choices and are encouraged to report earnings aggressively and to invest in risky projects, which leads to less conservatism.

Based on the above argument, I develop the following hypothesis of the relationship between accounting conservatism and political connection:

> ***H*$_1$** *All else being equal, politically connected firms are less likely to adopt conservative accounting.*

The unexpected crash in the Saudi Arabia stock market that resulted in the loss of 53% of its market value in 2006 indicates the need to develop effective corporate governance codes (CGC) that enhance governance practices among Saudi Arabian listed firms and protect investors (Al-Abbas, 2009; Alshehri & Solomon, 2012; Buallay et al., 2017). Since the CGC reforms of 2006, there still remain some weaknesses in the CGC system in relation to disclosure requirements (comply or explain), which may exacerbate information asymmetry (Al-Filali & Gallarotti, 2012; Al-Janadi et al., 2013). Such

[3] Larger shareholders tend to exercise their power in a number of forms, including product and other asset trading at unreasonable prices as well as interest-free cash borrowing; in China this amounts to about 40% in Chinese listed firms (Qiu, 2006).

weaknesses in the corporate governance structure and practices demonstrate a lack of accountability and transparency. Elite families may take advantage of this to exert influence in decision-making processes to serve their private interests at the expense of public interest (Al-Alkim, 1996). Even the media has been noted to be controlled to serve the interests of the economic and political elite (Al-Yousef, 2008). Therefore, to avoid agency conflicts that may occur due to royal family involvement; strong corporate governance practises are employed to prevent majority shareholders from exploiting minority shareholders in the firm (Fama & Jensen, 1983; Watts, 2003). These practises of CGC became mandatory in 2010 to serve as an economic buffer to prevent events like the crash of the Saudi Arabia stock market in 2006 and improve lender confidence. Based on the aforementioned above, strong corporate governance may have moderting effects on the relation between ruling family with political connection and accounting conservatism. I state my second hypothesis in the following form:

> ***H*₂** *Corporate governance moderates the association between politically connected firms and accounting conservatism.*

2.4 Research Design

2.4.1 Sample and data

My sample was drawn from the population of non-financial listed firms in the Saudi Stock Exchange (Tadawul) for the period 2007 to 2015. In 2007, the Saudi Arabian government begun the implementation of corporate governance as part of the commitment to promote investor confidence towards the diversification of the economy through private sector participation (CGC, 2006). I exclude firms in the financial sectors because of the complexity and differences in capital structures, regulation, and reporting styles (Mehran, Morrison, & Shapiro, 2011). Data relating to political connections of ruling family members on boards of directors, and other corporate governance characteristics, were hand-collected from firms' annual reports. The annual reports for firms listed in Tadawul provide full information regarding royal family members in the corporate governance section of these financial reports, including names, tribes and surnames. I obtained all financial variables from Capital IQ except monthly share prices, which were collected from DataStream. The definition of political connection and other related variables are provided in Appendix 2.1.

I obtained an original sample of 145 Saudi listed firms (1,305 firm-year observations) over the fiscal years 2007-2015. After excluding financial firms, Tadawual joint-listed

firms, firms without corporate governance information and firms with missing data on control variables, I had a final sample of 93 firms (724 observations) (see Table 2.1, Panel A). Table 2.1, Panel B shows the distribution of the ruling and non-ruling firms across the industries. The total number of Royal firms' observations in my sample is 162, fewer than the total number of non-ruling firms' observations. Materials industry sector represents the largest number firm-year observations having Royal family directors at 76, followed by consumer staples at 37 and industrials firms at 21 of the total sample 162.

Table 2.1 Summary of the Sample Selections

Panel A: Sample Selections of S&P Capital IQ 145 Saudi Listed Firms from 2007 to 2015	
Number of firms years in the S&P Capital IQ 145 2007-2015	1,305
Less:	
Financial services and insurance firms	(398)
Unavailable annual reports for corporate governance data and control variables	(183)
Final selected sample (93 firms)	724

Panel B: Ruling and Non-ruling Family Firms, by Industry

Industry name	All	Ruling	Non-ruling
Consumer discretionary	117	12	105
Consumer staples	116	37	79
Energy	33	7	26
Health Care	18	0	18
Industrials	105	21	84
Materials	276	76	200
Telecommunication services	32	9	23
Utilities	27	0	27

2.4.2 Empirical model

I estimate Equations (2.1 and 2.2) using a fixed effects regression with year and firm intercepts. There are two benefits of fixed-effect regression over OLS. First, biased estimates can potentially be produced by using panel data in an OLS regression because the observations are not entirely independent. Second, Greene (2000) noted that the fixed effects regression captures the effects of non-observable firm characteristics that are constant over time and associated with the independent variables. Therefore, the following empirical model using fixed effects regression to examine the association between the first

two measures of conservatism (*CON_ACC* and *CON_MTB)* and political connections of the royal family directors*:*

$$Conservatism_{i,t} = \beta_0 + \beta_1 Royal\_D_{i,t} + \beta_2 SIZE_{i,t} + \beta_3 Sales\_Growth_{i,t} + \beta_4 LEV_{i,t} + \beta_5 Profit_{i,t} + \beta_6 Cash_{i,t} + \beta_7 R\&D_{i,t} + \beta_8 CG\_Indx_{i,t} + \beta_9 Family\_D_{i,t} + \beta_{10} Goverment\_D_{i,t} + \beta_{11} Inst\_Own_{i,t} + \beta_{12} Geog\_Sigmt_{i,t} + \beta_{13} Firm\_Age_{i,t} + Year\ Fixed\ Effects + \varepsilon_{i,t} \quad \text{(Equation 2.1)}$$

I predict a negative effect of *Royal_D* on *CON_ACC* and *CON_MTB* CON-MKT in (Equation 2.1).

I also apply the asymmetric timeliness model *(CON_AT)* developed by Basu (1997):

$$E_{i,t}/P_{i,t-1} = \beta_0 + \beta_1 D_{i,t} + \beta_2 Return_{i,t} + \beta_3 D_{i,t} \times Return_{i,t} + \beta_4 Royal\_D_{i,t} + \beta_5 Royal\_D_{i,t} \times D_{i,t} + \beta_6 Royal\_D_{i,t} \times Return_{i,t} + \beta_7 Royal\_D_{i,t} \times D_{i,t} \times Return + \beta_K Control\_Var_{i,t} + \beta_I Control\_Var_{i,t} \times D_{i,t} + \beta_m Control\_Var_{i,t} \times Return_{i,t} + \beta_n Control\_Var_{i,t} \times D_{i,t} \times Return_{i,t} + Year\ Fixed\ Effects + \varepsilon_{i,t} \quad \text{(Equation 2.2)}$$

where βK Control_Var are SIZE, Sales_Growth, LEV, Profit, Cash, R&D, CG_Indx, Family_D, Goverment_D, Inst_Own, Geog_Sigmt, Firm_Age as defined in Section 2.4.2.3 below.

I expect that firms with ruling family member on the board will result in a lower asymmetric timeliness coefficient in (Equation 2.2).

2.4.2.1 Dependent Variables

For empirical tests, I apply three proxies of accounting conservatism, all widely used in the accounting literature (e.g., Franciset al., 2015; Ahmed & Duellman, 2013, 2007; Ahmed et al., 2002;). My first proxy is an accrual-based conservatism (*CON_ACC*) of Givoly and Hayn (2000), who compute accruals in the following form:

$$Accruals = [(INC + DEP - CF)] / TA \quad \text{(Equation 2.3)}$$

$$CON\_ACC = (Accruals/3\ years)\ x\ (-1) \quad \text{(Equation 2.4)}$$

where accruals are measured as income before extraordinary items and discontinued operations (INC) plus depreciation expense (DEP) minus operating cash flows (CF) to total assets.

The accrual-based conservatism (*CON_ACC*) is calculated as the average accrual value over a three-year period centred on year *t*,and multiplied by negative one. Higher values of *CON_ACC* indicate more accounting conservatism as accounting conservatism produces persistently negative accrual (Givoly & Hayn, 2000). Averaging over a couple of periods may mitigate the effects of any large temporary accruals, as accruals can be reversed within a one- to two-year period (Ahmed & Duellman, 2007). Since the sample of this study is 2007–2015, 11 years' complete financial data (2006–2016) are required to calculate accrual.

My second proxy is a market value-based measure of accounting conservatism (*CON_MTB*) which is calculated by multiplying the book-to-market ratio by -1. Higher *CON_MTB* values indicate greater conservative accounting since firms applying accounting conservatism should have lower book-to-market ratios (Beaver & Ryan, 2000). The strength of this proxy is that it reflects asymmetric information since it recognises earlier expenses, losses and deferred revenue, capturing a cumulative understatement of net assets relative to market value (Khan & Watts, 2009; Ahmed & Duellman, 2007; Ahmed et al., 2002). However, *CON_MTB* is also likely to be used as a measure of a firm's growth opportunities because these are reflected by market value (Ahmed & Duellman, 2007; Ahmed et al., 2002;). In addition to reflecting *CON_MTB,* conservatism is likely to reflect economic rents, which are generated by future growth opportunities as well as firms' assets-in-place (Ahmed et al., 2002; Ahmed & Duellman, 2007).

My third measure of conservatism is Basu's (1997) asymmetric timeliness model (*CON_AT*) that uses reverse regression between returns and earnings, capturing differences in the influence of negative returns on earnings and positive returns.

Basu (1997) estimates the following regression model as:

$$E_{i,t}/P_{i,t-1} = \beta_0 + \beta_1 D_{i,t} + \beta_2 Return_{i,t} + \beta_3 D_{i,t} \times Return_{i,t} + \varepsilon_{i,t} \quad \text{(Equation 2.5)}$$

where E_{it}/P_{it-1} is earnings before extraordinary items of firm *i* in year *t*, divided by its market value of equity in year *t-1*; *Return* is the 12-month cumulated share returns of a firm from nine months before the fiscal year's end to three months after its end; *D* is a dummy variable equal to *1* if returns are negative; *Return*×*D* is an interaction between *Return* and *D*. The Basu coefficient β_3 (usually referring to asymmetric timeliness) is the proxy of incremental timeliness of earnings that recognise bad news over good news. A significantly positive coefficient of β_3 shows a greater degree of accounting conservatism (Basu, 1997).

2.4.2.2 Independent variable

The main independent variable in this study is the political connections of ruling family members on boards of directors *(Royal_D).* This is a dummy variable that takes a value of 1if a firm has at least one ruling family member on the board of directors, 0 otherwise.

2.4.2.3 Control variables

Consistent with prior literature (Al-Hadi et al., 2016; Francis et al., 2015; Ahmed & Duellman, , 2013, 2007; Chaney et al., 2011; Lafond & Watts, 2008; Zhang, 2008), I include several variables in my analysis to control for firm characteristics and corporate governance. Watts and Zimmerman (1978) argue that large firms are likely to face political costs, which encourages them to adopt more accounting conservatism. I therefore include firm size (*SIZE*) in my regression model, calculated as the natural logarithm of total assets. Large institutions in the emerging Saudi market are visible and economically important (Al-Shammari et al., 2008), and I thus expect a positive relationship between firm size and conservatism (Ahmed & Duellman, 2007; Ahmed et al., 2002).

I include sales growth (*Sales_Growth*), measured as the annual percentage growth change in total sales. Ahmed et al. (2002) contend that the growth of sales is likely to affect accounting conservatism because it influences accruals (i.e., changes inventory and receivable). Furthermore, large sales growth is likely to influence the expectations of markets for future cash flows, which in turn influence *CON-MKT*. Studies have shown that *Sales_Growth* is consistently and negatively related to *CON_ACC* and positively related to *CON_MTB* (Ahmed et al., 2002; Ahmed & Duellman, 2007).

I control for leverage (*LEV*), calculated as the total long-term debt scaled by total assets. It is predicted a positive relationship between *LEV* and conservatism because firms with greater levels of *LEV* are likely to have a higher conflict between shareholders and bondholders that may increase the demand for accounting conservatism (Francis et al., 2015; Zhang, 2008; Ahmed & Duellman, 2007). Consistent with prior studies, I control for profitability and cash holding because profitable firms tend to use more accounting conservatism (Francis et al., 2015; Ahmed & Duellman, 2007; Ahmed et al., 2002). I include research and development costs scaled by total sales (*R&D*) as a control variable as it has been argued that *R&D* is likely to affect economic rents generated by positive NPV investment opportunities (captured in *CON_MTB)* and assets-in-place (Ahmed & Duellman, 2007).

Following prior studies (e.g., Al-Hadi et al., 2016; Chaney et al., 2011; Chi et al., 2009; Wan-Hussin, 2009), I control for the firm's level of governance mechanism (*CG_Indx),* the *CG_Indx* variable is constructed by six items: four dummy variables for board characteristics (CEO duality with chairman, board of busyness directors, majority independent directors on the board in at least three, and membership of chairman in at least one of board monitoring committee) ; a dummy variable takes a value of 1if a firm with an audit committee, and a dummy variable takes a value of 1if a firm with a nomination or remuneration committee. I scale the total number by an expected maximum number of six items. I include the presence of family directors (Family_D) on the board as one of my control variables. It is a dummy variable that takes value of 1 if there is at least one family member on the corporate board, otherwise 0 (Al-Hadi et al., 2016; Ali, Chen, & Radhakrishnan, 2007). I followed Al-Hadi et al. (2016) approach in controlling for government ownership (Government_D), measured as 1 if there is at least one government directors on the board, otherwise 0.

I also control for institutional ownership, *Inst_Own,* by including the percentage of institutional shareholders because institutional investors with large stockholdings can influence the degree and type of monitoring activities through their voting power (Ahmed & Duellman, 2007; Bhojraj & Sengupta, 2003). I control for geographic diversification (*Geog_Sigmt*), calculated as a dummy variable that takes a value of 1 for firms with geographic segments, 0 otherwise. This is consistent with studies that that find that firms with *Geog_Sigmt* tend to have low values and high agency costs (e.g., Bushmanet al., 2004; Lamont & Polk, 2002). Following Bushman et al. (2004) and et al. (2016), I also include the natural logarithm of the number of years a firm has been incorporated (Firm_Age), as a control variable and expect a negative relationship between firm age and conservatism. I winsorise all continuous variables at the 1% and 99% levels to minimize the influence of outliers on standard deviations and sample means.

2.5 Empirical Results and Discussion

2.5.1 Univariate analysis

Table 2.2, Panel A presents the descriptive statistics for all variables in the regression model (1). The mean value of the accrual-based conservatism (*CON_ACC)* is -0.289 with a standard deviation of 0.242, which is lower than the mean value of accrual-based conservatism reported by Ahmed and Duellman (2007), Krishnan and Visvanathan (2008) and Elshandidy and Hassanein (2014). This negative sign suggests that the level of

CON_ACC in Saudi Arabian firms is lower than in countries such as the United States and United Kingdom. This is most likely due to the unique influence of royal family directors in the board of Saudi firms. My result for the mean (standard deviation) value of the book-to-market ratio multiplied by -1 (*CON_MTB*) is -0.572 (0.319), which is similar to Ahmed and Duellman's (2007) findings. On average, 22.4% of the listed non-financial firms in Saudi Arabia have at least one royal family member on their board (*Royal_D)*, with a standard deviation of 0.417; this finding is similar to that of Al-Hadi et al. (2016) who found an average 31.2%, with a standard deviation of 0.464, among the listed financial firms in GCC countries as a whole. I also show the mean (median) of *Royal_P* (the proportion of royal family members on the board over board size) in the sample period is 0.0416 (0.00) with maximum four directors in the board. For control variables, I find in my sample that the mean (median) of firm assets is $3,653 million ($540.55 million). The means of *SIZE, Sales_Growth* and *Leverage* are similar and consistent with the findings of Ahmed and Duellman (2007) and Ahmed et al. (2002), *Profit,* and *Cash,* comprise about 9% and 10%, respectively. In addition, *Family_D* has a relatively high average percentage of 31.5%, which is consistent with the results of Al-Hadi et al. (2016) and Halawi and Davidson (2008). The statistics of my control variables are similar and consistent with prior studies in GCC countries (Al-Hadi et al., 2016; Eulaiwi, Al-Hadi, Taylor, Al-Yahyaee, & Evans, 2016). The mean value of the dummy variable for negative return (*D*) is 0.512, which shows that 51.2% of the sample have negative stock return.

I separate my sample into two sub-samples to indicate the existence of at least one ruling member on the board of directors and Table 2.2, Panel B reports the univariate comparison. I find that the mean of *CON_ACC* decreases from -0.279 to -0.327 with *Royal_ D* and this mean difference of 0.049 is statistically significant at 5%. This univariate comparison supports my hypothesis that firms with ruling family members on the board are less conservative in their financial reporting. With regard to firm variables, the mean value of firm assets in ruling family directors are estimated at US$5,593.368, which is higher than the mean value of non-ruling family with US$3,093.744. These results suggest that ruling family directors appear to exist in large firms. Furthermore, I confirm the degree of the power of the ruling family as flow: the mean total sales of ruling family firms are estimated at US$2,786 whilst the mean of non-ruling is US$1,064, and the mean of outstanding shares in the existing ruling family is 295.719, which is higher than 265.445 of non-ruling family. Furthermore, the ruling family firms tend to have more long-term debt with a mean value of US$1,378.07 and pay lower interest rates to the lenders with mean of 3.227%, while non-ruling family firms have a mean of US$896.19 long-term debt and a

high mean of 8.33% interest rates. They also generate more cash from operating income with a mean of US$772.84, while non-ruling has a mean value of US$289.24. Finally, ruling family firms have a higher likelihood of reporting a loss with a mean of 0.082, compared to non-ruling with 0.072. the ruling family employs services of local auditors avoiding the big four auditors who are widely associated with accounting conservatism as part of their process. These results also suggest that managers have protection in their decision-making by ruling family directors, which supports my hypothesis.

Family_D and *Inst_Own* with *Royal_ D* tend to be smaller and the mean differences are statistically significant. These mean differences between firms' characteristics with ruling family directors confirm the necessity to control for these variables.

Table 2.2 Descriptive Statistics and Comparisons by Ruling Family Members

Panel A: Descriptive Statistics

Variable	N	Mean	S.D.	Min	Mdn	Max
CON_ACC	724	-0.289	0.241	-0.936	-0.240	0.166
CON_ MTB	724	-0.572	0.319	-2.009	-0.509	-0.106
Royal_D	724	0.224	0.417	0.000	0.000	1.000
Royal_P	724	0.0416	0.088	0.000	0.000	0.429
SIZE	724	6.445	1.663	3.054	6.293	11.342
Sales_Growth	724	0.125	0.404	-0.808	0.075	2.637
Leverage	724	0.137	0.165	0.000	0.064	0.624
Profit	724	0.099	0.218	-4.062	0.101	0.566
Cash	724	0.100	0.093	0.004	0.063	0.415
R&D	724	0.000	0.001	0.000	0.000	0.007
CG_Indx	724	0.541	0.164	0.000	0.500	0.833
Family_D	724	0.315	0.465	0.000	0.000	1.000
Goverment_D	724	0.231	0.422	0.000	0.000	1.000
Inst_Own	724	0.123	0.191	0.000	0.000	0.700
Geog_Sigmt	724	0.725	0.447	0.000	1.000	1.000
AGE	724	3.059	0.691	0.000	3.178	4.174
CON_AT	724	0. 058	0. 066	-0.355	0.058	0. 523
Return	724	0.043	0.429	-0.774	-0. 014	1.926
D	724	0.512	0.500	0.000	1.000	1.000

Table 2.2 (continued)

Panel B: Comparisons by Ruling Family Member						
	***Royal_D*=0**		***Royal_D*=1**		**Mean Difference**	
Variable	**Mean**	**STD**	**Mean**	**STD**	**Difference**	***t*-Value**
CON_ACC	-0.279	0.240	-0.327	0.242	0.049	2.28**
CON_MTB	-0.654	0.652	-0.548	0.305	-0.106	-2.00**
Assets ($MM)	3,093.744	376	5,593.368	1499	-2,499.624	-2.34**
Sales_Growth	0.130	0.418	0.106	0.352	0.024	0.73
Leverage	0.150	0.172	0.092	0.123	0.058	4.80***
Profit	0.104	0.138	0.093	0.384	0.009	0.28
Cash	0.098	0.093	0.109	0.102	-0.011	-1.21
R&D	0.001	0.009	0.001	0.004	0.0004	-1.05
CG_Indx	0.542	0.167	0.540	0.154	0.001	0.10
Family_D	0.351	0.478	0.019	0.135	0.332	14.58***
Goverment_D	0.101	0.302	0.123	0.329	-0.022	-0.76
Inst_Own	0.129	0.193	0.098	0.185	0.031	1.88**
Geog_Sigmt	0.746	0.436	0.654	0.477	0.091	2.18**
AGE	3.028	0.664	3.194	0.679	-0.166	-2.75***

Notes: This table reports descriptive statistics in Panel A and univariate comparisons for ruling family director in Panel B. All Variable definitions are presented in appendix 2.1. *, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively.

2.5.2 Correlation analysis

Table 2.3 presents the Pearson correlation matrix between the accounting conservatism and ruling family member with political connections and control variables. It shows that *Royal_D* is negatively correlated with accrual-based conservatism (*CON_ACC*) at the 5% significance level.

2.5.3 Political connections of ruling family members and conservatism

Table 2.4, Column (1) presents the primary results of estimating (Equation 2.1) using a fixed effects regression to examine the association between political connections of the ruling family directors' proxy (*Royal_D*) and accrual-based conservatism measures (*CON_ACC)*. I follow Petersen (2009) who used a clustering procedure to correct the coefficient t-statistics. According to my hypothesis, I predict the political connection variable (*Royal_D*) will be negative. The fixed effects coefficient on β_1 is negative (-0.095) and significant at the 1% level, implying that firms with political connection have less accounting conservatism. With respect to control variables, the coefficient *SIZE* is significantly positive at the 1% level, consistent with Ahmed and Duellman (2007). The coefficient of *Profit* in Column (1) is negatively significant at 5%, and *Leverage* is negatively significantly related to *CON_ACC* at the 1% level. The coefficient on *Inst_Own* and *Geog_Sigmt* are positive and significant at the 10% level.

Table 2.3 Pearson Correlation

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	*CON_ACC*	1														
2	*CON_MTB*	0.011	1													
3	*Royal_D*	-0.08*	0.068	1												
4	*SIZE*	0.15***	-0.27***	0.027	1											
5	*Sales_Growth*	0.14***	-0.039	-0.024	0.10**	1										
6	*Leverage*	0.31***	-0.35***	-0.15***	0.60***	0.17***	1									
7	*Profit*	-0.071	0.21***	0.065	0.048	0.029	-0.24***	1								
8	*Cash*	-0.09*	0.061	0.044	-0.041	0.0015	-0.14***	0.14***	1							
9	*R&D*	0.024	-0.16***	-0.029	0.26***	-0.019	0.049	0.13***	0.20***	1						
10	*CG_Indx*	0.031	-0.08*	-0.003	-0.10**	-0.033	-0.09*	-0.09*	0.033	-0.031	1					
11	*Family_D*	0.022	0.11**	-0.31***	-0.21***	-0.051	-0.23***	0.11**	-0.14***	-0.13***	0.12**	1				
12	*Gov_D*	-0.31***	0.08*	0.029	0.19***	-0.021	0.039	0.10**	0.10**	0.033	-0.11**	-0.21***	1			
13	*Inst_Own*	0.27***	-0.14***	-0.068	0.26***	0.09*	0.28***	0.031	-0.043	0.24***	-0.08*	-0.053	-0.14***	1		
14	*Geog_Sigmt*	0.071	0.13***	-0.09*	-0.037	0.016	-0.11**	-0.036	-0.11**	-0.016	-0.002	0.24***	-0.12**	-0.028	1	
15	*AGE*	-0.36***	0.22***	0.10**	-0.29***	-0.13***	-0.45***	0.25***	0.10**	-0.004	-0.003	0.15***	0.09*	-0.34***	0.21***	1

Notes: This table presents the correlations for main variables. All Variable definitions are presented in appendix 2.1. *, **, and *** indicate significance at 10%, 5%, and 1% levels, respectively. CON_AT, D and Return for Basu Model (1997) are not reported for reasons of collinearity when interaction terms are involved (Mohammed et al., 2017).

Table 2.4, Column (2) reports the results of estimating (Equation 2.1) with the dependent variable being the market-based proxy of accounting conservatism *(CON_MTB)*. The coefficient on *Royal_D* variable is significantly negative, consistent with what observed in Column (1) when using the accrual-based conservatism. This result supports my hypothesis that politically connected firms have lower *CON_MTB*, i.e. lower level of accounting conservatism. For control variables, *Sales_Growth* is positively and significantly associated with the market-based conservatism proxy at the 5% level, but firm age (*AGE*) is negative and significant.

Table 2.4 also reports the results of (Equation 2.2) using Basu (1997)'s asymmetric timeliness model *(CON_AT)* as the proxy for accounting conservatism. For the purpose of brevity, the coefficient of the control variables and intercept terms are omitted.[4] Consistent with the results of Ahmed and Duellman (2007), I find the coefficient of asymmetric timeliness for Basu regression in my sample is 0.062 in Column (3), which is similar to their results (0.064). Column (4) shows the results of estimating (Equation 2.1) for *CON_AT* with firm-fixed effects, but without control variables. The interaction term *D*×*Return* with a coefficient of 0.083 is significant at the 1% level (*t*-value = 4.18), suggesting that, on average, my sample firms recognise economic losses (bad news) more quickly than economic gains (good news). The coefficient of *Royal_D*×*D*×*Return* is -0.120 and significant at the 5% level (*t*-value = -2.35), which is consistent with my prediction that the degree of accounting conservatism is associated negatively with the existence of royal family members on the board of directors.

Column (5) of Table 2.4 presents the results of estimating (Equation 2.2) for *CON_AT* with firm-fixed effects and all additional control variables. The coefficient on *Royal_D*×*D*×*Return* (β_7) is negatively significant at the 1% level (*t*-test of -3.37). This result indicates that the timeliness of earnings is less asymmetric for firms with ruling family directors, which is consistent with my finding about political connections and accounting conservatism in Column (1) and (2). The effects of the control variables *Profit*×*D*×*Return, Family_D*×*D*×*Return Gov_D*×*D*×*Return and Inst_Own*×*D*×*Return* are negatively significant relative to asymmetric timeliness. *SIZE*×*D*×*Return* is significantly and positively related to asymmetric timeliness at the 5% level.

[4] The result achieved by using the basic Basu (1997) model is reported in appendix 2.2.

Overall, the findings presented in Table 2.4 support my hypothesis that the degree of conservative accounting is related to the presence of ruling family members on the board. My results support the argument derived from French and Raven's (1959) theory of power that having royal family directors with power on their board may influence firms' management decisions by providing protection, which may encourage them to manipulate the quality of financial reporting. It is also consistent with findings presented by Chaney et al. (2011) that firms with politically connected management can use such protection to control the degree of their financial reporting, providing stakeholders with a lower than optimal quality of accounting information and undertaking less conservative accounting measures. In terms of economic significance, the coefficient presented in the Column (1) of Table 2.4 indicates a 1.644 basis point change in accounting conservatism (*CON_ACC*) for one standard deviation change in the presence of royal directors on the board (*Royal_D)*[5]. The adjusted R^2 of the model that includes *CON_ACC* is 28.3%, *CON_MTB* is 25.6%, and *CON_AT* is 40.5%.

Table 2.4 Political Connection and Accounting Conservatism - Using Fixed Effects Regression

Variable	(1)	(2)	(3)	(4)	(5)
	CON_ACC	***CON_MTB***	***CON_AT***	***CON_AT***	***CON_AT***
Royal_D	**-0.095*** **	**-0.090** **		**-0.018***	-0.008
	(-2.97)	**(-2.58)**		**(-1.82)**	(-0.64)
SIZE	0.233***	0.088			-0.001
	(5.41)	(0.77)			(-0.06)
Sales_Growth	-0.011	0.035**			-0.001
	(-1.37)	(2.02)			(-0.09)
Leverage	-0.291***	0.071			0.061
	(-2.82)	(0.37)			(1.07)
Profit	-0.221**	0.167			0.246***
	(-2.44)	(1.35)			(5.88)
Cash	0.104	0.058			0.039
	(1.04)	(0.44)			(1.23)
R&D	10.416	12.644			4.211
	(0.73)	(1.11)			(1.19)
CG_Indx	0.007	-0.051			0.007
	(0.09)	(-0.51)			(0.07)
Family_D	0.116	-0.010			-0.033***
	(0.58)	(-0.24)			(-4.68)

[5] Gauged as [0.417 (S.D. of Royal_D)* 0.095 coefficient)/ 0.241 (S.D. of CON_ACC)].

Variable	(1)	(2)	(3)	(4)	(5)
	CON_ACC	***CON_MTB***	***CON_AT***	***CON_AT***	***CON_AT***
Gov_D	-0.007	0.061			0.013
	(-0.13)	(0.72)			(1.49)
Inst_Own	0.220*	0.165			-0.029
	(1.94)	(0.86)			(-0.89)
Geog_Sigmt	0.109*	-0.054			0.006
	(1.90)	(-0.60)			(0.47)
AGE	-0.041	-0.153***			0.022
	(-0.41)	(-3.11)			(1.23)
D			0.004	0.007	0.003
			(0.85)	(1.20)	(0.11)
Return			0.003	-0.003	-0.043
			(0.36)	(-0.39)	(-1.52)
D×Return			0.062***	0.083***	-0.102
			(3.98)	(4.18)	(-1.13)
Royal_D×D				-0.016	-0.005
				(-1.56)	(-0.79)
Royal_D×Return				0.044*	0.029**
				(1.83)	(2.56)
Royal_D×D×Return				**-0.120****	**-0.071*****
				(-2.35)	**(-3.37)**
Constant	-1.539***	-0.398	0.064***	0.068***	-0.017
	(-4.32)	(-0.59)	(24.79)	(21.54)	(-0.21)
Control Variable Interactions	N/A	N/A	N	N	Y
Year & firm FE	Y	Y	Y	Y	Y
Observations	724	724	724	724	724
Adjusted R-squared	0.283	0.256	0.075	0.07	0.405

Notes: CON_ACC, *CON_MTB*, and *CON_AT* are three proxies for accounting conservatism. *CON_ACC* refers to the accrual-based conservatism, *CON_MTB* is the book-to-market ratio multiply by -1, and *CON_AT is* the asymmetric timeliness of earnings. Variable definitions are presented in Appendix 2.1. All control variables in Column (5) are interacted with *D*, *Return* and *D*× *Return*, but are suppressed for reasons of brevity. Coefficient estimates with t-statistics shown in parentheses and the p-values are based on two-tailed tests clustered by firm that included by industry and time fixed effects. ***, **, * represent p-values less than 1%, 5% and 10% levels of significance, respectively.

2.6 Robustness tests

2.6.1 Additional tests

2.6.1.1 Alternative proxies of political connection: robustness checks

I perform additional robustness tests. First, I conduct two alternative proxies of political connection: (1) the proportion of royal family directors on the board (*Royal_P*); (2) a dummy variable to indicate if a firm's chairperson is a ruling family director (*Royal_Chair*). Literature examining political connections on accounting conservatism have tended to rely on a single proxy (Mohammed et al., 2017; Chaney et al., 2011; Bushman & Piotroski, 2006; Faccio, 2006; Gul, Tsui, & Dhaliwal, 2006). In this study I am able to use a number of measures of royal family directors, as their family names are disclosed in firms' annual reports (Al-Hadi et al., 2016). Table 2.5 reports the results using these two measures of political connections. The estimated coefficients on *Royal_P* and *Royal_Chair* variables are all significantly negative for both measures of accounting conservatism (*CON_ACC* and *CON_MTB).* For the third measure of conservatism (CON_AT), the coefficients on *Royal_P×D×Return* and *Royal_Chair×D×Return* variables are also negative and significant at 1% level. My results are robust to different measures of political connection.

Table 2.5 Political Connection and Accounting Conservatism – Alternative Measures of Political Connection

	(1)	(2)	(3)	(4)	(5)	(6)
Variable	***CON_ACC***	***CON_MTB***	***CON_AT***	***CON_ACC***	***CON_MTB***	***CON_AT***
Royal_P	**-0.613*** **	**-0.258***	-0.06			
	(-3.56)	**(-1.94)**	(-1.43)			
Royal_P×D×Return			**-0.447*** **			
			(-3.40)			
Royal_Chair				**-0.087*** **	**-0.079** **	-0.009
				(-3.16)	**(-2.19)**	(-0.75)
Royal_Chair×D×Return						**-0.070*** **
						(-3.38)
SIZE	0.236***	0.086	-0.001	0.227***	0.083	-0.001
	(5.55)	(0.76)	(-0.04)	(5.32)	(0.73)	(-0.06)
Sales_Growth	-0.008	0.036**	-0.001	-0.012	0.034*	-0.001
	(-1.15)	(2.05)	(-0.06)	(-1.54)	(1.97)	(-0.10)
Leverage	-0.294***	0.081	-0.061	-0.272**	0.089	-0.061
	(-2.94)	(0.43)	(-1.07)	(-2.62)	(0.47)	(-1.07)

Variable	(1)	(2)	(3)	(4)	(5)	(6)
	CON_ACC	***CON_MTB***	***CON_AT***	***CON_ACC***	***CON_MTB***	***CON_AT***
Profit	-0.225**	0.167	0.246***	-0.215**	0.172	0.246***
	(-2.48)	(1.35)	(5.90)	(-2.37)	(1.38)	(5.91)
Cash	-0.098	0.061	-0.039	-0.102	0.060	-0.04
	(-1.01)	(0.46)	(-1.23)	(-1.02)	(0.46)	(-1.24)
R&D	-10.679	11.955	4.182	-10.699	12.280	4.225
	(-0.74)	(1.03)	(1.17)	(-0.73)	(1.07)	(1.19)
CG_Indx	0.009	- 0.050	0.001	0.008	- 0.050	0.002
	(0.11)	(-0.50)	(0.06)	(0.11)	(-0.50)	(0.08)
Family_D	0.117	-0.010	-0.033***	0.116	-0.010	-0.033***
	(0.59)	(-0.23)	(-4.74)	(0.58)	(-0.24)	(-4.70)
Gov_D	-0.005	0.066	0.014	-0.007	0.062	0.013
	(-0.08)	(0.98)	(1.62)	(-0.12)	(0.92)	(1.47)
Inst_Own	0.211*	0.162	-0.03	0.229*	0.174	-0.029
	(1.85)	(0.84)	(-0.90)	(1.97)	(0.91)	(-0.88)
Geog_Sigmt	0.109*	-0.058	-0.006	0.108*	-0.055	-0.006
	(1.94)	(-0.65)	(-0.47)	(1.88)	(-0.61)	(-0.46)
AGE	-0.037	-0.138***	0.022	-0.026	-0.139***	0.022
	(-0.38)	(-2.79)	(1.28)	(-0.27)	(-2.74)	(1.28)
Constant	-1.563***	-0.436	-0.017	-1.551***	-0.412	-0.017
	(-4.46)	(-0.64)	(-0.21)	(-4.38)	(-0.61)	(-0.21)
Control Variable Interactions	N/A	N/A	Y	N/A	N/A	Y
Year & firm FE	Y	Y	Y	Y	Y	Y
Observations	724	724	724	724	724	724
Adjusted R-squared	0.291	0.255	0.405	0.282	0.255	0.404

Notes: Columns *(CON_ACC), (CON_MTB),* and (*CON_AT)* report the models for the accrual-based conservatism, the book-to-market ratio multiply by -1and the asymmetric timeliness of earnings, respectively. Variable definitions are presented in Appendix 2.1. All control variables in model (3) and (6) are interacted with *D, Return* and *D× Return*, but are suppressed for reasons of brevity. Coefficient estimates with t-statistics shown in parentheses and the p-values are based on two-tailed tests clustered by firm that included by industry and time fixed effects. ***, **, * represent p-values less than 1%, 5% and 10% levels of significance, respectively.

2.6.1.2 Discretionary accruals, risk and alternative proxy measures of control variables

I re-analyse the main regression model using discretionary accruals |*EM*| and Beta *(Systematic_risk)* as a control variables.[6] I apply a cross-sectional model developed by Jones (1991) to calculate the absolute value of the discretional accruals. Both discretionary accruals and accounting conservatism can be measured for the same constructs, and may capture any tendency of conservative managers to distinguish earnings or assets (Francis et al., 2015). *Systematic_risk* for firm's Beta is a dummy variable equal to 1; 0 if the Beta is above the value of one. Beta is calculated as a firm's beta for the monthly stock return in a fiscal year (Al-Hadi et al., 2016; Francis et al., 2015). Accounting conservatism is negatively associated to *Systematic_risk*, as conservative accounting may decrease the uncertainty related to the market estimation of future cash flows (Francis et al., 2015; Francis et al., 2004). Firms with a high Beta are more likely to be preferred by outside investors (Francis, Philbrick, & Schipper, 1994). The results reported in Table 2.6 Panel A show that the relationship between accounting conservatism and *Royal_D* after controlling for |*EM*| and *Systematic_risk* tend to be significantly negative. Thus, my initial inferences remain unaffected and support my hypothesis.

As an additional robustness check of my results in the main analysis (see Table 2.4), I use alternative proxy measures of three control variables (firm's size (SIZE2), leverage (Leverage2) and market-to-book ratio (MB)). SIZE2 is the firm's size measured as the natural log of total equity at the end of the fiscal year, Leverage2 is the firm's leverage calculated as the total debt scaled by market value of equity at the end of the fiscal year and MB is the market value of equity deflated by the book value of equity at the end of the fiscal year. I only include these control variables because prior studies report these variables to be significant determinants of accounting conservatism (Chen et al., 2017; Khan & Watts, 2009).

Table 2.6 Panel B presents my regression results for the different proxies of my control variables. I observe that my *Royal_D* and *Royal_D* $\times D \times$ *Return* proxies are all significantly negatively related to conservatism ($p < 0.05$ or better). Therefore, my Hypothesis is supported by my empirical results, and again my inferences remain unchanged.

[6] I also control for the Altman (Z-score) risk but I do not report the results for reasons of brevity. The Altman risk uses a dummy variable equaling 1 if Z-score > the median value of the sample. The Z-score is calculated as follows: (1.2 × Working Capital / Total Assets + 1.4 × Retained Earnings / Total Assets + 3.3 × Earnings Before Interest and Taxes / Total Assets + 0.6 × Market Value of Total Equity / Book Value of Total Liabilities + 0.99 × Sales/ Total Assets). Firm bankruptcy risk negatively affects accounting conservatism (Biddle, Ma, & Song, 2020). As firm bankruptcy risk is influenced several factors including delaying the recording of earnings and net assets, taxation, and dividends (Francis et al., 2015; Watts, 2003).

Table 2.6 Political Connection and Conservatism: Using Variety of Control Variables

Panel A: Controlling for Discretionary Accruals and Risk (Beta)

	(1)	(2)	(3)
Variable	***CON_ACC***	***CON_MTB***	***CON_AT***
Royal_D	**-0.100*** **	**-0.085** **	-0.008
	(-3.24)	**(-2.21)**	(-0.69)
(EM)	-0.333***	-0.159	-0.036
	(-2.65)	(-0.91)	(-0.76)
Systematic_risk	0.026*	0.016	-0.004
	(1.77)	(0.99)	(-0.53)
Royal_D×D×Return			**-0.067*** **
			(-3.16)
(EM)×D×Return			-0.445
			(-1.11)
Systematic_risk×D×Return			0.011
			(0.42)
Constant	-1.545***	-0.325	-0.006
	(-4.42)	(-0.47)	(-0.07)
Control Variable Interactions	N/A	N/A	Y
Year & firm FE	Y	Y	Y
Observations	724	724	724
Adjusted R-squared	0.293	0.262	0.406

Panel B: Alternative Proxy Measures of Control Variables

	(1)	(2)	(3)
Variable	***CON_ACC***	***CON_MTB***	***CON_AT***
Royal_D	**-0.0709** **	**-0.1079** **	**-0.0275** **
	(-2.10)	**(-2.05)**	**(-2.18)**
SIZE2	0.1458***	0.0181	0.0183
	(2.89)	(0.24)	(0.84)
Leverage2	0.0354*	-0.03	-0.0067*
	(1.90)	(-1.03)	(-1.71)
MB	0.0086**	0.1096***	-0.0056
	(2.54)	(5.62)	(-1.55)
Royal_D×D×Return			**-0.1139** **
			(-2.21)
SIZE2.×D×Return			0.0093
			(0.80)
Leverage2×D×Return			-0.0199
			(-0.39)
MB×D×Return			-0.0097
			(-1.20)
Constant	-1.0452***	-0.8569*	-0.0187
	(-3.70)	(-1.81)	(-0.14)
Control Variable Interactions	N/A	N/A	Y
Year & firm FE	Y	Y	Y
Observations	724	724	724
Adjusted R-squared	0.199	0.434	0.126

Notes: Panel A presents results using discretionary accruals and risk (Beta). Panel B presents results using different proxies of control variables. Columns (1), (2) and (3) report the models for the accrual-based conservatism *(CON_ACC)*, the book-to-market ratio multiply by -1 *(CON_MTB)*, and the asymmetric timeliness of earnings (*CON_AT)*, respectively.

Variable definitions are presented in Appendix 2.1. All control variables in Column (3) are interacted with *D*, *Return* and *D*× *Return*, but are suppressed for reasons of brevity. SIZE2 is the natural log of book value of equity. Leverage2 is total debt by market value of equity. MB is the market value of equity divided by the book value of equity. Coefficient estimates with t-statistics shown in parentheses and the p-values are based on two-tailed tests clustered by firm that included by industry and time fixed effects. ***, **, * represent p-values less than 1%, 5% and 10% levels of significance, respectively.

2.6.2 Endogeneity checks

The results of my main regression (see Table 2.4) suggest a significantly negative association between ruling family directors in boardrooms and accounting conservatism. However, these findings may be affected by endogeneity, which has the potential to lead to biased regression estimates (Wooldridge, 2010); I therefore apply several robustness checks to consider the consequence of endogeneity in this study.

2.6.2.1 Moderation effects results

In order to examine the effect of mandated corporate governance regulations in the Saudi capital market on conservative accounting practices, I employ the moderating effect of 2010 corporate governance mandate method as a test of potential endogeneity issues

. In 2010 the Saudi Capital Market Authority made it mandatory for all listed firms in Tadawul to comply with corporate governance regulation (Alzahrani, 2013). In this study, this event is marked as an exogenous event, upon which a sub-sample is constructed to include firm-year observations for the years 2007–2012. I then divide firm-year observations for pre- and post-corporate governance mandate using a dummy variable taking a value of 1 if the firm-year observation falls in the years 2010–2012, and 0 otherwise. The moderating effect method compares conservative accounting when a royal family is present on a firm's board, using three years (2007–2009) before corporate governance became mandatory in 2010 (i.e., the non-treatment group) and three years (2010–2012) after it became mandatory (i.e., the treatment group). I apply the same set of control variables as in the main regression. Using three years before 2010 and three years after that period reduces my sample size to 446.

I also introduce an interaction term (*Royal_D*×*CG_Event*) to the regression model for *CON_ACC* and *CON_MTB, and* an interaction term (*Royal_D*×*D*×*Return*×*CG_Event*) to the regression model for *CON_AT,* where *CG_Event* = a dummy variable scored as 1 if the sample observations are from the 2010–2012 period; 0 otherwise (2007–2009)

I report the results from the moderating effect regression in Table 2.7. The coefficient for *Royal_D* variable is significantly negative (-0.111) for *CON_ACC* at the 1% level,

showing that the negative association between *Royal_D* and *CON_ACC* existed in the pre-CG_Event period (2007–2009). The coefficient for the interaction term, *Royal_D×CG_Event*, in Column (1) is significantly positive for *CON_ACC* at the 5% level. The coefficient of *Royal_D* variable is still negative but reduced to -0.019 (-0.111+0.092) in the post-mandatory period (2010-2012), suggesting the 2010 corporate governance regulation lessens the negative relationship of royal family directors on the board and accounting conservatism. In Column (3) of Table 2.7, the coefficient of *Royal_D* × *CG_Event* × *D*× *Return* is also significantly positive ($p < 0.10$). my moderating effect regression findings decreases the unobservable omitted variable bias.

Table 2.7 Moderating Effect Regression Results

	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
Variable	*CON_ACC*	*CON_MTB*	*CON_AT*	*CON_ACC*	*CON_MTB*	*CON_AT*
Royal_D	**-0.111*** **	**0.079**	0.01	**-0.0495**	**-0.1371** **	-0.0007
	(-2.99)	**(1.10)**	(0.47)	**(-0.79)**	**(-2.50)**	(-0.03)
Royal_D×D×Retur n			-0.083			**-0.0590***
			(-1.34)			**(-1.89)**
CG_Event	-0.070*	-0.284***	0.011			
	(-1.91)	(-3.80)	(0.78)			
CG_Event×D× Return			0.028			
			(0.49)			
Royal_D x CG_Event	**0.092** **	**0.045**	0.009			
	(2.06)	**(0.57)**	(0.40)			
Royal_D×CG_Even t×D×Return			**0.223***			
			(1.86)			
Constant	0.043	0.716***	-0.103***	-0.4471	0.2141	-0.0659
	(0.45)	(3.13)	(-2.69)	-0.87	-0.37	(-0.30)
Control Variable & Interactions	Y	Y	Y	Y	Y	Y
Year & firm FE	Y	Y	Y	Y	Y	Y
Observations	446	446	446	452	452	452
Adjusted R-squared	0.381	0.276	0.557	0.161	0.25	0.418

Notes: Columns (1), (2) and (3) report the models for the accrual-based conservatism *(CON_ACC)*, the book-to-market ratio multiply by -1 *(CON_MTB)*, and the asymmetric timeliness of earnings (*CON_AT)*, respectively. Variable definitions are presented in Appendix 2.1. All control variables in Column (3) are interacted with *D*, *Return* and *D*× *Return*, but are suppressed for reasons of brevity. Coefficient estimates with t-statistics shown in parentheses and the p-values are based on two-tailed tests clustered by firm that included by industry and time fixed effects. ***, **, * represent p-values less than 1%, 5% and 10% levels of significance, respectively.

In order to check the robustness of my results as sensitivity, I also rerun the regression only on the period 2011-2015 to avoid the impact of the financial crisis and the change in regulation happened in 2010. The results presented in columns (4-6) in Table 2.7, show that the coefficient for *Royal_D* variable is still negative for *CON_ACC*, but insignificant and significantly negative in column (5) *CON_MTB* at the 5% level. The coefficient of *Royal_D* × *D*× *Return* is also significantly negative ($p < 0.10$) in column (6). The magnitudes of the coefficients on *Royal_D* in columns (4-6) are significantly less effect than that of my main regression estimates in Table 2.4. These results support hypothesis 2 and suggest that ruling family may face greater corporate governance mechanism, and corporate governance regulation appears to mitigate the power of ruling family that influence accounting conservatism.

2.6.2.2 Propensity score matching (PSM) results

The endogeneity issue can arise if ruling family members participate only on industry sectors in which the accounting conservatism level is lower, therefore the associated between ruling family and conservatism can go in both directions. In order to address the concern of endogeneity problem may exist from the use of dummy variable of ruling family directors in my main regression (see Table 2.4), which could produce biased analysis estimates, I perform a propensity-matching score test (Shipman, Swanquist, & Whited, 2016). My control group for the PSM test consists of firm-year observations in which royal directors are not present, while my treatment group consists of firm-year observations in which royal directors are present. Firstly, I follow Shipman et al. (2016) method and the logistic regression is run using the same control variables along with the year- and firm-fixed effects that I used in my main regression model (see (Equation 2.1) and (Equation 2.2)). A dummy variable is used as a dependent variable, coded 1 if a royal director is present in the firm-year observation; 0 otherwise. Using a one-to-one nearest neighbour matching technique, each firm-year observation from the treatment group is matched with a firm-year observation from the control group. In addition, I combine my matched sets of year-firm observations and perform my fixed-effect regression. I also employ a caliper distance of 0.01, which allows for the imposing of fewer (more) firms when good propensity matches are not available, yet avoids the risk of bad propensity matches (Dehejia & Wahba, 2002).

The first-stage regression model (see Table 2.8) presents that most of control variables are significantly associated with ruling family directors ($p < 0.10$ or better).[7] For the second stage regression analysis, Table 2.8 shows the coefficient for ruling family is significantly and negatively associated with conservatism (measured by *CON_ACC*, *CON_MTB* and *CON_AT)* across all regression models ($p < 0.05$ or better), indicating that firms with royal directors on their boards practise less conservatism than their counterparts. These PSM results support H1 and mitigate the bias concern.

Table 2.8 Propensity Score Matching (PSM)

	First Stage	**Second Stage**					
		(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
		Nearest-neighbour	**Caliper (0.01)**	**Nearest-neighbour**	**Caliper (0.01)**	**Nearest-neighbour**	**Caliper (0.01)**
Variable	***Royal_D***	***CON_ACC***	***CON_ACC***	***CON_MTB***	***CON_MTB***	***CON_AT***	***CON_AT***
Royal_D		**-0.1762*** **	**-0.1782*** **	**-0.1766** **	**-0.1722** **	-0.0137	-0.0122
		(-2.74)	**(-3.01)**	**(-2.35)**	**(-2.25)**	(-0.90)	(-0.79)
Royal_D×D×Return						**-0.1576** **	**-0.1443** **
						(-2.48)	**(-2.06)**
SIZE	0.3359***	0.2199***	0.2187***	0.4167	0.4163	-0.0327	-0.0334
	(4.20)	(2.95)	(2.88)	(1.35)	(1.35)	(-0.97)	(-0.99)
Sales_Growth	0.0090	-0.0226	-0.0229	0.0122	0.014	-0.0181	-0.0184
	(0.03)	(-0.75)	(-0.76)	(0.39)	(0.44)	(-1.39)	(-1.40)
Leverage	-5.2046***	-0.4815**	-0.4898**	-0.5401	-0.5696	0.1423*	0.1408*
	(-5.41)	(-2.12)	(-2.17)	(-1.10)	(-1.14)	(1.94)	(1.82)
Profit	0.6438	-0.2307	-0.2337	-0.0514	-0.0457	0.2492***	0.2424***
	(0.70)	(-1.35)	(-1.36)	(-0.23)	(-0.20)	(3.33)	(3.16)
Cash	-1.1397	-0.1383	-0.1332	-0.084	-0.1183	-0.0982	-0.1015
	(-1.02)	(-0.80)	(-0.73)	(-0.31)	(-0.43)	(-1.45)	(-1.50)
R&D	-235.6058**	-16.2961*	-17.2997*	-19.5827	-19.1453	2.0867	3.4992
	(-2.45)	(-1.72)	(-1.90)	(-0.90)	(-0.85)	(0.49)	(0.85)
CG_Indx	0.5664	0.1940*	0.2080**	0.0586	0.0662	-0.0277	-0.0316
	(0.86)	(1.95)	(2.10)	(0.38)	(0.41)	(-1.26)	(-1.36)
Family_D	-3.8436***	-0.4485***	-0.4581***	0.1302	0.1212	-0.0662***	-0.0670***
	(-6.37)	(-5.01)	(-4.76)	(1.38)	(1.22)	(-3.76)	(-3.82)
Gov_D	-0.7388**	-0.0141	-0.0173	-0.0246	-0.0254	0.0290*	0.0284*
	(-2.26)	(-0.35)	(-0.41)	(-0.29)	(-0.29)	(1.71)	(1.76)
Inst_Own	0.0095	0.1943**	0.1900**	0.3382***	0.3588***	0.0004	-0.0029
	(0.01)	(2.09)	(2.01)	(2.71)	(3.05)	(0.01)	(-0.07)

[7] I exam the quality of my propensity matching method by calculating covariates for all of the control variables in the logistic regression mothed (un-tabulated).

	First Stage	Second Stage					
		(1)	(2)	(3)	(4)	(5)	(6)
		Nearest-neighbour	Caliper (0.01)	Nearest-neighbour	Caliper (0.01)	Nearest-neighbour	Caliper (0.01)
Variable	***Royal_D***	***CON_ACC***	***CON_ACC***	***CON_MTB***	***CON_MTB***	***CON_AT***	***CON_AT***
Geog_Sigmt	-0.1627	0.1550**	0.1559**	-0.1375*	-0.1426*	0.0185	0.0194
	(-0.73)	(2.55)	(2.53)	(-1.75)	(-1.80)	(0.82)	(0.88)
AGE	0.4765**	0.0524	0.0395	-0.0284	-0.0051	0.0126	0.016
	(2.37)	(0.33)	(0.23)	(-0.34)	(-0.07)	(0.45)	(0.55)
Constant	-4.0128***	-1.7489**	-1.7024**	-2.6184	-2.6891	0.2148	0.2109
	(-4.16)	(-2.35)	(-2.13)	(-1.34)	(-1.39)	(0.89)	(0.87)
Control Variable & (Interactions)	(N/A)	N/A	N/A	N/A	N/A	Y	Y
Year & firm FE	Y	Y	Y	Y	Y	Y	Y
Observations	724	242	235	242	235	242	235
Adjusted (Pseudo) R-squared	(0.214)	0.262	0.257	0.271	0.268	0.564	0.567

Notes: Columns (1) and (2) report the models for the accrual-based conservatism *(CON_ACC)*, columns (3) and (4) present the book-to-market ratio multiply by -1 *(CON_MTB)* and columns (5) and (6) and *CON_AT is* the asymmetric timeliness of earnings. Variable definitions are presented in Appendix 2.1. All control variables in Column (5) and (6) are interacted with *D*, *Return* and *D*× *Return*, but are suppressed for reasons of brevity. Coefficient estimates with t-statistics shown in parentheses and the p-values are based on two-tailed tests clustered by firm that included by industry and time fixed effects. ***, **, * represent p-values less than 1%, 5% and 10% levels of significance, respectively.

2.6.2.3 Instrumental variables (IVs) two-stage least squares (2SLS) regression results

Appointments of ruling family directors might be endogenously determined and could not be random. Furthermore, a number of factors related to the board other than the existence of royal directors may contribute to the negative relationship between firms with political connection and accounting conservatism by correlating with the error term (Al-Hadi et al., 2016). Therefore, to mitigate the probability of endogeneity bias, I re-examine the relationship using a two-stage least-squares (2SLS) regression (e.g., Al-Hadi et al., 2016; Ho et al., 2015; Larcker & Rusticus, 2010). In the first stage of this regression, I use top ten family directors (Family_Top10)[8], where ruling family is one of them and ruling firm founders (Royal_Founder) as the instrumental variables (IVs).

[8] According to the survey by Halawi and Davidson (2008) the family ownership concentration in KSA is very powerful and it listed the KSA top ten families stock market in 2008 (Al-Rajhi, El-Issa, El-Mady, El-Saud, Al-Abanumay, Al-Faris, Al-Hakami, Al-Husseini, Al-Omran, and Al-Rashid).

Specifically, I estimate the 2SLS model as follows:

First stage: $Y_{i,t} = \beta_0 + \beta_1 Family\_Top10_{i,t} + \beta_2 Royal\_Founder_{i,t} + \beta_3 X_{i,t} + \eta_{i,t}$ (Equation 2.6)

and

Second stage: $CON\_ACC_{i,t} = \beta_0 + \beta_1 instrumented\ Royal_{i,t} + \beta_2 X_{i,t} + \varepsilon_{i,t}$ (Equation 2.7)

where $Y_{i,t}$ is either *Royal_D* or *Royal_Chair* (Definitions are presented in appendix 2.1); Family_Top10 is a dummy variable taking the value of 1 if a top ten family director is present; 0 otherwise; taking the value of 1 if the *Royal_Founder* is a royal member; 0 otherwise; $X_{i,t}$ represents a set of control variables; $CON\_ACC_{i,t}$ is accrual based-based on conservatism[9]; and instrumented $Royal_{i,t}$ is the fitted value of the ruling family directors (using either, *Royal_D* or *Royal_Chair*) indicator from the first-stage regression.

My use of the first IV, top ten family directors, is justified by the concentration of stock ownership as well as the close relationships and continuous partnerships between the top ten families and royal family in Saudi Arabia (Eulaiwi et al., 2016; Mazaheri, 2013). The presence of economic familism and its active role in shaping relationships within the Saudi capital market contributes to the appointment of relatives and belonged ones in royally founded firms (Mazaheri, 2013). However, literature review regarding the top ten family is yet to provide evidence on accounting policy. Hence, I suggest that existence of the top ten families in the board can increase *Royal_D* or *Royal_Chair*, but does not affect the accounting conservatism of the firm.

Columns (1) and (3) of Table 2.9 report the results from the first-stage regressions with the *Royal_D* and *Royal_Chair*, respectively, as the dependent variables. The coefficients are statistically significant at 1% for my instrumental variables, suggesting strong relation between Family_Top10, Royal_Founder and having a ruling family director on the board by using either *Royal_D* or *Royal_Chair* in the first stage.

Columns 2 and 4 of Table 2.9 present my results for the second-stage regressions, showing that the coefficient of *Royal_D* and *Royal_Chair* variables are both significantly negative at 1% level (-0.068 and -0.067, respectively). Importantly, my results remain robust even after controlling for endogeneity.

[9] I also ran this model using CON_MTB. In the unpresented results, I find that royal family directors is significant at 10%, but the endogeneity test of endogenous regressors is insignificant. Furthermore, I exclude the asymmetric timeliness as a measure of conservatism (CON_AT) due to the interaction term of instrumental variables with Royal_D or Royal_Chair, in specific, the coefficient on the interaction term (i.e., (Royal_D= Family_Top10 + Royal_Founder)*Return*D) does not provide an intuitive interpretation of findings.

In order to support the theoretical 2SLS test, I also report the results of an under-identification test (Kleibergen-Paap rk Lm test), weak-identification test (Kleibergen-Paap rk Wald F test), over-identification test (Hansen's test), and endogeneity test (Durbin-Wu-Hausman test). Table 2.9 presents the regression statistics for the validity and relevance of the two-stage least-squares estimates. For instance, Hansen's test results show p-values of 0.6725 and 0.695. So, I cannot reject the null hypothesis, because I have confidence about the validity of the instruments. The Kleibergen-Paap Lm statistic of underidentification suggest that I can reject the null hypothesis that the model is underidentified – in other words, the model is not underidentified. So, the instruments are relevant as they are correlated with the endogenous regressor. As to the Endogeneity test statistics, my test whether a variable presumed to be endogenous in the 2SLS could instead be treated as exogenous. The P-values of my test suggest that the test statistics are significant. Hence, I reject the null hypothesis. The test statistics suggest the variable, *Royal_D*, must be treated as endogenous justifying the appropriateness of using 2SLS.

Table 2.9 Political Connection and Accounting Conservatism: 2SLS Regression Results

	(1)	(2)	(3)	(4)
		CON_ACC		***CON_ACC***
Variable	**First Stage-2SLS**	**Second Stage-2SLS**	**First Stage-2SLS**	**Second Stage-2SLS**
Royal_D		**-0.068*** **		
		(-2.61)		
Royal_Chair				**-0.067*** **
				(-2.62)
SIZE	0.031***	0.013*	0.026***	0.012*
	(3.39)	(1.78)	(2.74)	(1.74)
Sales_Growth	0.03	0.028	0.024	0.028
	(1.23)	(1.54)	(0.99)	(1.52)
Leverage	-0.542***	0.128*	-0.440***	0.135*
	(-5.77)	(1.74)	(-4.63)	(1.85)
Profit	-0.268***	0.043	-0.305***	0.04
	(-3.32)	(0.70)	(-3.73)	(0.67)
Cash	0.220**	-0.061	0.236**	-0.06
	(1.98)	(-0.74)	(2.10)	(-0.72)
R&D	-12.319	-7.222	-10.963	-7.132
	(-1.40)	(-1.07)	(-1.23)	(-1.06)
CG_Indx	-0.255***	0.084*	-0.290***	0.082*
	(-4.15)	(1.83)	(-4.64)	(1.78)
Family_D	-0.036	-0.007	-0.03	-0.006
	(-1.36)	(-0.33)	(-1.11)	(-0.31)
Gov_D	0.066*	-0.197***	0.055	-0.197***
	(1.83)	(-7.51)	(1.51)	(-7.52)

	(1)	(2)	(3)	(4)
		CON_ACC		*CON_ACC*
Variable	**First Stage-2SLS**	**Second Stage-2SLS**	**First Stage-2SLS**	**Second Stage-2SLS**
Inst_Own	0.147**	0.164***	0.160***	0.165***
	(2.50)	(3.71)	(2.69)	(3.72)
Geog_Sigmt	-0.003	0.088***	0	0.089***
	(-0.12)	(4.69)	(-0.02)	(4.71)
AGE	-0.045**	-0.088***	-0.035*	-0.087***
	(-2.40)	(-6.16)	(-1.82)	(-6.10)
Constant	0.128	0.02	0.123	0.02
	(1.23)	(0.26)	(1.17)	(0.25)
Instrumental Variables				
Family_Top10	0.213***		0.224***	
	(8.73)		(9.05)	
Royal_Founder	0.802***		0.804***	
	(22.60)		(22.34)	
Year &Industry	Y	Y	Y	Y
Observations	724	724	724	724
Adjusted R-squared	0.636	0.344	0.63	0.344
Estimations Test for Instrumental Variables				
1- Under-identification test statistics				
Kleibergen-Paap rk LM statistic		400.500		399.887
P-value		0.0000		0.0000
2- Weak-identification test statistics				
Kleibergen-Paap rk Wald F statistic		429.593		428.124
10% maximal IV size		19.93		19.93
3- Over-identification test statistics				
Hansen J statistic		0.179		0.154
Chi-sq(6) P-Value		0.6725		0.695
4- Endogeneity test statistics				
Endogenous regressors		10.648		11.167
Chi-sq(1) P-Value		0.0011		0.0008

Notes: Columns (1) and (3) present the results from the first-stage regressions with the ruling family dummy (*Royal_D*) and chair ruling family dummy (*Royal_Chair)* as the dependent variables. Columns (2) and (4*)* represent the second stage of 2SLS with the accrual-based conservatism (CON_ACC) as the dependent variable, where I include the *Royal_D* in Column (2) and *Royal_Chair* in Column (4). *Family_Top10* is calculated as a dummy variable if firm board includes one of the top ten families on the board and *Royal_Founder* is a dummy variable if royal member is the founder for the firm. Variable definitions are presented in Appendix 2.1. Coefficient estimates with t-statistics shown in parentheses and the p-values are based on two-tailed tests. ***, **, * represent p-values less than 1%, 5% and 10% levels of significance, respectively.

2.7 Conclusion

This study investigates the relationship between the presence of royal family directors on firms' boards and accounting conservatism in Saudi Arabia. I adopt three measures for accounting conservatism: a market-based measure of Beaver and Ryan (2000), an accrual-based measure of Givoly and Hayn (2000), and an asymmetric timeliness measure of Basu (1997). Using a sample of 724 year-firm observations of non-financial listed firms in the Saudi Stock Exchange over the period 2007–2015, I find evidence supporting my hypothesis that politically connected firms (measured by the presence of royal family director on the board) have less conservative accounting practices. My results are robust to different measures of political connection and endogeneity tests. For example, I use difference-in-difference approach, a propensity-score matching approach and 2SLS regression and found robust results. I also find that when corporate governance became mandatory in 2010, these regulations mitigated the influence of ruling family directors on accounting conservatism. The evidence presented in this study is supported by the theory of power (French & Raven, 1959), which suggests that powerful individuals in a society have the ability to dominate other individuals using a number of influential means, including rewards. Consistently, royal directors on a board are able to influence management's decisions by guaranteeing larger financial benefits and legal protection; and management can therefore exercise opportunistic reporting behaviour in which less than optimal conservative accounting policies are employed.

This study contributes to the theory of power as well as to agency theory by providing important complementary evidence in a unique political setting. The evidence presented in this study shows that, as the theory of power suggests, agency costs increase in the presence of royal directors. Whilst this study does focus on Saudi-Arabia only, the capital market implications of my findings can be relevant to these other economies. For example, my findings can be extrapolated to other emerging or newly developed economies such as many of the South-East Asian economies and South American economies.

Appendices

Appendix 2.1 Variable Definitions and Measurement

Variable	Acronym	Definitions and Measurements
Dependent variables: Accounting Conservatism		
Accrual- based conservatism	*CON_ACC*	[(Income before extraordinary item & discontinued operation + depreciation - operating cash flow)/ total asset] / 3 years x (-1).
Market-value based conservatism	*CON_MTB*	Book-to-market ratio multiply by -1.
Asymmetric timeline	*CON_AT*	Net Income before extraordinary items / beginning of fiscal year market value of equity.
Political Connections Variables		
Royal family directors	*Royal_D*	A dummy variable coded 1 if a firm with at least one ruling family member on the board of directors, zero otherwise.
Royal family members	*Royal_P*	The number of royal family directors on the board of a firm divided by total board of directors.
Royal family chairman	*Royal_Chair*	A dummy variable coded 1 if a firm with the board chairperson that is a ruling family director, zero otherwise.
Control Variables		
Firm size	*SIZE*	Natural log of total assets.
Sales growth	*Sales_Growth*	The annual percentage growth change in total sales.
Leverage	*LEV*	The total long-term debt scaled by total assets.
Profit	*Profit*	The Income before extraordinary items divided by total assets.
Cash	*Cash*	Cash and short term investments divided by total assets.
Research and development	*R&D*	Research and development costs scaled by total sales and replacing missed values of R&D with zero.
Governance mechanism index	*CG_Indx*	Corporate governance index for a firm constructing into six items: (1) CEO and chairman duality, (2) board of busyness directors, (3) majority independent directors on the board in at least 3 or more, (4) membership of chairman in at least one of board monitoring committee, (5) firm with an audit committee, and (6) firm with a nomination or remuneration committee. Each of these six items take a value of 1 if present, zero otherwise.
Family director	*Family_D*	A firm with family director, family founder and family ownership is scored as 1, zero otherwise.
Government director	*Gov_D*	A firm with government director, government founder and government ownership is scored as 1, zero otherwise.
Institutional ownership	*Inst_Own*	Percentage of institutional shareholders.
Geographic diversification	*Geog_Sigmt*	A dummy variable takes on a value of 1 for firms with geographic segments, and zero otherwise.
Age of firm	*Firm_Age*	The natural log of the number of years since the firm was established.
Share returns	*Return*	12-month share returns on a firm from 9-month before the fiscal year-end to 3-month after the end of the fiscal year.
Negative returns	*D*	A dummy variable that is equal to 1 if returns are negative; zero otherwise.

Appendix 2.2 Political Connection and Asymmetric Timeliness (CON_AT) Using Basu (1997) Model

	(1)	(2)	(3)
Variable	***CON_AT***	***CON_AT***	***CON_AT***
D	0.0037	0.0069	0.0029
	(0.85)	(1.20)	(0.11)
Return	0.0026	-0.0033	-0.0433
	(0.36)	(-0.39)	(-1.52)
D×Return	0.0619***	0.0832***	-0.102
	(3.98)	(4.18)	(-1.13)
Royal_D		-0.0183*	-0.0078
		(-1.82)	(-0.64)
Royal_D×D		-0.0164	-0.0052
		(-1.56)	(-0.79)
Royal_D×Return		0.0436*	0.0287**
		(1.83)	(2.56)
Royal_D×D×Return		-0.1202**	-0.0712***
		(-2.35)	(-3.37)
SIZE			-0.0008
			(-0.06)
SIZE×D			-0.0026
			(-0.90)
SIZE×Return			0.0013
			(0.32)
SIZE×D×Return			0.0191**
			(2.28)
Sales_Growth			-0.0009
			(-0.09)
Sales_Growth×D			0.0087
			(0.36)
Sales_Growth×Return			-0.0012
			(-0.03)
Sales_Growth×D×Return			-0.0006
			(-0.01)
Leverage			-0.0608
			(-1.07)
Leverage×D			0.0863
			(1.37)
Leverage×Return			-0.0097
			(-0.18)
Leverage×D×Return			0.0743
			(0.53)
Profit			0.2461***
			(5.88)

	(1)	(2)	(3)
Variable	***CON_AT***	***CON_AT***	***CON_AT***
Profit×D			-0.0404
			(-1.21)
Profit×Return			0.1473**
			(2.32)
Profit×D×Return			-0.2628**
			(-2.29)
Cash			-0.0393
			(-1.23)
Cash×D			0.0658*
			(1.76)
Cash×Return			0.0058
			(0.10)
Cash×D×Return			0.0803
			(0.77)
R&D			4.2108
			(1.19)
R&D×D			-0.9712
			(-0.52)
R&D×Return			-7.9569
			(-1.04)
R&D×D×Return			6.5316
			(0.73)
CG_Indx			0.0016
			(0.07)
CG_Indx ×D			-0.0092
			(-0.41)
CG_Indx ×Return			0.024
			(0.99)
CG_Indx ×D×Return			0.0275
			(0.43)
Family_D			-0.0327***
			(-4.68)
Family_D×D			0.0026
			(0.19)
Family_D×Return			-0.0124
			(-1.19)
Family_D×D×Return			-0.0606**
			(-2.54)
Gov_D			0.0132
			(1.49)
Gov_D×D			-0.0176
			(-1.49)

	(1)	(2)	(3)
Variable	***CON_AT***	***CON_AT***	***CON_AT***
Gov_D×Return			-0.0174
			(-0.76)
Gov_D×D×Return			-0.0729**
			(-2.37)
Inst_Own			-0.0293
			(-0.89)
Inst_Own×D			-0.0470*
			(-1.70)
Inst_Own×Return			0.0344
			(1.26)
Inst_Own×D×Return			-0.2157***
			(-2.67)
Geog_Sigmt			-0.0057
			(-0.47)
Geog_Sigmt×D			-0.0012
			(-0.16)
Geog_Sigmt×Return			0.0007
			(0.06)
Geog_Sigmt×D×Return			-0.0167
			(-0.77)
AGE			0.0219
			(1.23)
AGE×D			0.0067
			(1.01)
AGE×Return			0.0081
			(0.98)
AGE×D×Return			0.0197
			(0.88)
Constant	0.0641***	0.0684***	-0.0171
	(24.79)	(21.54)	(-0.21)
Year & firm FE	Y	Y	Y
Observations	724	724	724
Adjusted R-squared	0.075	0.07	0.405

Notes: CON_AT reports the model for the asymmetric timeliness of earnings. Variable definitions are presented in. Coefficient estimates with t-statistics shown in parentheses and the p-values are based on two-tailed tests clustered by firm that included by industry and time fixed effects. ***, **, * represent p-values less than 1%, 5% and 10% levels of significance, respectively.

Chapter Three

3

Family Control, Firm Life Cycle and Corporate Cash Holdings

3.1 Introduction

Financial cash policies within firms are determined by several factors. One factor is the existence of family control within the firm (Liu, Luo, & Tian, 2015). Prior studies show that major financial decisions within firms differ between family controlled and non-family controlled firms (Hu, Wang, & Zhang, 2007). I am motivated to examine the determinants of cash holdings of family controlled firms in emerging markets such as the Gulf Cooperation Council (GCC) because these jurisdictions are loci of agency conflicts. These conflicts may arise between majority and minority shareholders because majority shareholders retain cash in order to pursue private interests (Claessens, Djankov, Fan, & Lang, 2002; Faccio, Lang, & Young, 2010; Liu et al., 2015). There is a paucity of research on whether a firm's cash holding policy is determined by the existence of conflicts between managers and shareholders (Dittmar & Mahrt-Smith, 2007; Gao, Harford, & Li, 2013; Harford, Mansi, & Maxwell, 2008). This research investigates the influence of family control on cash retention and whether family control can reduce cash holdings, which may mitigate agency conflicts.

There is a significant number of family controlled firms in emerging markets such as the GCC (Anderson & Reeb, 2003; Faccio & Lang, 2002; La Porta, Lopez-de-Silanes, & Shleifer, 1999; Villalonga & Amit, 2006). Family members who control firms can exploit minority shareholders and use a firm's cash holdings to fund self-serving ventures (Claessens et al., 2002; Cronqvist & Nilsson, 2003; Kuan, Li, & Chu, 2011; Liu et al., 2015). However, prior studies show that, compared with family controlled firms, non-family controlled firms are constrained, especially in emerging markets, due to family controlled firms can mitigate agency conflicts between managers and shareholders, because the separation of ownership and control (Anderson & Reeb, 2003; Villalonga & Amit, 2006; Kuan, Li, & Liu, 2012; Wang & Shailer, 2017). There is an inverse relationship between family control and cash holding levels within the firm; family controllers reduce cash holdings because accumulation of cash can attract hostile takeovers or can persuade ambitious shareholders to disrupt family influence on firms' operations (Anderson & Reeb, 2004). Hence, family controlled firms opt for low cash reserves (Faleye, 2004; Liu 2011). However, I argue that the reduction of cash holding by family controllers is channelled towards improving investment. Thus, these cash decreases are employed towards achieving future profits for the firm and the behaviour of family controllers is investigated across different life cycle stages of the firm as well as quantile regression to demonstrate different levels of cash holdings.

On the one hand, Durán, Lozano and Yaman (2016) suggest that family-controlled firms accumulate more cash holdings and conclude that cash holdings of the firm is not determined by family influence or the lack of it rather by the long term goals and structure of the firm where as for my study I postulate that the level of cash holding within a firm is reduced at all stages of the firms life cycle. By investigating the influence of family control on the cash holdings of firms in the GCC[10] region, this study aims to provide insights on how family control affects the level of cash holdings across the different life cycles of the firm.

Reports provided from the Pearl Initiative, PwC, and Hawkamah suggest that nearly 80% of the firms in the GCC region are family controlled and comprise 60% of the capital market (Halawi & Davidson, 2008). Family controlled firms are responsible for more than 90% of the GCC's non-oil wealth.[11] The inclusion of family members in the executive management and on the board of directors can affect corporate cash flows within a firm, especially in emerging markets where family connections may determine access to resources. In the GCC, family influences a firm's cash structure, investment level, financial oversight and internal controls (Chrisman, Chua, & Litz, 2004; Hamadi, 2010). Information asymmetry and moral hazard are negated by including family members in a firm's management structure (Fama & Jensen, 1983; Richardson, 2006). Further, firm life cycle theory suggests that firms go through several developmental stages that are associated with different cash policies and strategies (Miller & Friesen, 1980, 1984; Quinn & Cameron, 1983).

Using a sample of non-financial listed firms from the six GCC countries from 2006 to 2016, my empirical results suggest that family controlled firms reduce cash reserves at different levels as they progress through the life-cycle stages. I employ quantile regression to examine the influence of family control on firms' cash holdings. I find that family control of firms plays a dominant role in lowering the level of cash holdings during the growth, maturity and shakeout stages. Further, I find that family control increases investment in the maturity stage of the firm's life cycle. Consistent results were obtained using different measures of corporate cash holdings and family control such as a family index. Additional analysis shows that family control further reduces cash holdings in firms

[10] The Gulf Cooperation Council (GCC) was established in 1981 and is considered an economic union of six Arab countries in the Gulf region: The Kingdom of Saudi Arabia (KSA), Oman (OMN), the United Arab Emirates (UAE), Kuwait (KUW), Bahrain (BAH) and Qatar (QAT).

[11] For more details, see the report produced by the Pearl Initiative and PwC in 2012, which is available at https://www.pwc.com/m1/en/publications/documents/pipwc-report.pdf

with high levels of institutional or government ownership. Overall, my results are robust to endogeniety tests such as propensity score matching (PSM), two-stage least squares (2SLS) and generalised method of moments (GMM).

This study contributes to and extends the literature in several important ways. First, I contribute to existing knowledge on the influence of family control on firms' cash holdings. In particular, my use of various measures of family control makes a methodological contribution in determining the influence of family control on firms' cash holdings. In particular, I use an index of attributes that collectively measure the level of family control, and in doing so, negate the risks incurred in prior studies that may have relied on a single variable to assess the strength of family control. Second, my study opposes literature on the precautionary motive for holding cash which mitigates risks against market fluctuations and other unforeseen circumstances (Myers & Majluf, 1984). Family controlled firms tend to avoid retaining high levels of cash to avert agency conflicts in which managers seek to exploit cash reserves to meet personal objectives (Fama & Jensen, 1983; Ferreira & Vilela, 2004; Jensen, 1986; Jensen & Meckling, 1976; Liu 2011). Third, I investigate how the association between family control and cash holdings evolves through corporate life-cycle stages. Each firm approaches policy decisions differently depending on the governance structure of the firm which in turn will vary across life cycle stages (Dickinson, 2011). This study provides evidence that shows that family controlled firms in the GCC have relatively lower levels of cash in the growth, mature and shakeout stages of life cycle development. Firms' strategy of having lower levels of cash mitigate agency problems that may arise when managers use cash towards acquisition of non-pecuniary benefits, and from ambitious shareholders who may attempt to take control of the firm (Faleye, 2004). Fourth, I provide evidence to support the conjecture that family controlled firms in the GCC, have been able to make investments that increase firm value in line with the increased importance of family controlled firms. Prior studies by Anderson and Reeb find a negative relationship between families and cash holding, I delved deeper to provide insights into the relationship of family control and cash holdings in the GCC region across firm's various life cycle stages as it differs from other regions due to the ideology underpinning the establishment of governments and their entry into capital markets. I consider the different political governance styles of GCC countries and the capital market policies that apply within each country. The analysis of the various countries shows that family controlled firms reduce cash reserves in all countries (KSA, OMN, UAE, KUW, BAH and QAT).

In the remainder of this study, Section 2 presents the background of family control in the GCC region. Section 3 discusses my hypotheses, and Section 4 describes my research design and measurement of variables. Empirical analyses are presented in Section 5, and Section 6 presents my conclusions.

3.2 Family control in the GCC region

In the GCC region, many firms are family controlled or dominated (Eulaiwi et al., 2016). Family owners of GCC firms tend to own a majority of shares which gives them significant control (Al-Yahyaee, Pham, & Walter, 2011; Eulaiwi et al., 2016). For instance, government surveys reveal that some 20 large family groups own 60% of equity in GCC firms (Aaltonen, 2013; Halawi & Davidson, 2008).[12] The success of family firms in the GCC has been attributed to their ability to develop high-level financial and political relationships and entrepreneurial capabilities over several generations. These ownership characteristics differ from those of firms in Western countries and in other emerging economics (Al-Shammari, Brown, & Tarca, 2008; Eulaiwi et al., 2016).

The social structure of firms, which is based on value kinship ties (Mazaheri, 2013), has influenced their financing decisions and investor behaviour. Close family bonds align the economic interests and resources of family controlled firms in the GCC (Hayton, Chandler, & DeTienne, 2011; Starr & MacMillan, 1990). This creates a solid foundation for family firms to predominate in the region's capital markets (Aaltonen, 2013; Al-Yahyaee et al., 2011).

The dominant presence of family firms has been sustained over many generations (Anderson, Mansi, & Reeb, 2004). Leaders are chosen from within the family with the sole purpose of protecting the interests of the firm and ensuring its long-term survival and improvement (Davis, Schoorman, & Donaldson, 1997; James, 1999; Karra, Tracey, & Phillips, 2006). Jaggi, Leung, and Gul (2009) and Chi, Hung, Cheng, and Lieu (2015) suggest that controlling families have incentives to appoint family members as their successors to firms' boards and management teams. Thus, the traditional owner–manager conflicts are curtailed by the heavy presence of families in the GCC capital markets (Ramady, 2012).

[12] In addition, a PwC professional survey (2016) shows that family businesses employ 80% of the total workforce and contribute about 60% of the GDP of the GCC economies. This report is available at https://www.pwc.com/m1/en/publications/family-business-survey/middle-east-family-business-survey-2016.pdf

Family networks provide an array of benefits for GCC firms (Habbershon, Williams, & MacMillan, 2003; Habbershon & Williams, 1999). Resource-dependency theory argues that family members augment organisational capabilities, networks and controls, which in turn constitute important resources for firms (Danes, Stafford, Haynes, & Amarapurkar, 2009; Habbershon & Williams, 1999). Further, this special feature of family relationships reduces transaction costs, encourages transparency and bolsters managerial resourcefulness (Gedajlovic & Carney, 2010; Verbeke & Kano, 2012).

Family ownership structure in the GCC region is peculiar in that family power can determine the firm's internal control, level of market competence, availability of capital, access to external funds, and extent of international recognition (Chrisman, Chua, Kellermanns, & Chang, 2007; Chrisman et al., 2004; Hamadi, 2010). Family representation on the board and in the executive management of GCC firms can affect corporate cash holdings and investment activities, particularly in a developing market where access to resources can be based on family connections. Given the importance of family in facilitating business in the GCC, a high level of family control likely improves cash decision-making and promotes development of investment choices and projects.

3.3 Hypotheses development

3.3.1 Family control and cash holdings

Prior research (e.g., Chung, Kim, Kim, & Zhang, 2015; Harford et al., 2008; Opler et al., 1999) suggests that agency costs and information asymmetry are pertinent when examining the relationship between ownership and level of corporate cash holdings. Shareholders do not react positively to retaining funds within a firm; they expect that excess liquidity is better used externally (Jensen, 1986). For example, Jensen and Meckling (1976) argue that managers may use funds for their private benefit or make inefficient decisions about cash investment. Moral hazard theory suggests that executives may invest in projects with negative net present values (NPV) that do not align with their firm's strategies (Biddle, Hilary, & Verdi, 2009). For instance, Fama and Jensen (1983) and Richardson (2006) argue that managers may embark on empire-building activities using free cash flows rather than prioritising shareholders' interests. Additionally, investment decisions can result from transparency issues between managers and investors (Myers & Majluf, 1984). In many cases when managers are privy to information about a firm's ability to generate future cash flows, they may use this information to pursue their personal goals (Biddle et al., 2009). Access to cash by managers largely depends on the level of transparency allowed when

they conduct business activities (Chung et al., 2015), making it difficult for shareholders to monitor managerial actions in opaque information environments. Consequently, shareholders will curtail managers' access to free cash flows to deter them from engaging in activities that may lead to agency problems (Jensen, 1986; Stulz, 1990).

Demsetz and Lehn (1985) suggest that agency conflicts oppose the goals of investors, which are to maximise firm value and to improve profits. The free-rider problem is counterproductive; thus, families have strong incentives to monitor managers, especially because family wealth is interconnected with firm welfare. Anderson and Reeb (2003) argue that large cash holdings induce hostile takeovers. Given that founding families value their positions in the firm, it is in their best interest to minimise cash held by the firm to avoid takeovers (Anderson & Reeb, 2003; Faleye, 2004).[13] The takeover-avoidance hypothesis suggests that family firms maintain low cash reserves to inhibit hostile takeovers (Liu 2011). This agrees with stewardship theory, which suggests that the ambition of the principal and the agent may align in firms with family management (Davis et al., 1997). Managers are induced to work to fulfil the interests of the family due its influence in the firm (Che & Langli 2015, Villalonga, Amit, Trujillo, & Guzmán 2015). Furthermore, family controlled firms may avoid conflicts by encouraging effective communication and trust-building activities across the family. In addition, families will hold less cash if the governance structure supports the expectations of the manager (agent) and the family owner (principal).

Demsetz and Lehn (1985) argue that the best interests of shareholders are served by integrating ownership and control to diminish managerial expropriation. This integration positions the founding family strategically to influence the firm as majority shareholders, wielding control over the board of directors. James (1999) posits that families can anticipate positive viability of the business, which may lead to well-informed decisions on cash policy that align with long-term investment horizons through a less opaque business environment, hence, reduced moral hazard. This discussion shows that information asymmetry between managers and investors can potentially affect the level of corporate cash holdings. The family's long-term investment horizons may aid to avoid the tendency for mangers' self-interested behaviour and instead encourage them to work to meet family or firm demands (Stein, 1988). Therefore, I argue that family ownership can be used to monitor and discipline managerial decisions on cash policy.

[13] Coincidentally, Duran et al. (2016) finds a positive association between family control and cash holding for firms in Europe. He postulated that owing to the precautionary motive for holding money, family owned firms would withhold profits within the firm to cater for future generations as a means of stockpiling wealth.

Managers of firms that retain high levels of cash may embark on self-serving expenditure that might include insolvent investments (Jensen, 1986; Jensen & Meckling, 1976). Therefore, family-owned firms should seek to have maximum influence on management to reduce cash holdings and mitigate agency problems. For firms with a low level of cash holdings, determination of the level of cash required to sustain long-term investment horizons is difficult (Jensen, 1986; Myers & Majluf, 1984; Richardson, 2006). In previous studies, concerns about the agency cost of cash flows have been highlighted; hence, family-controlled firms must have high managerial influence to ensure transparent cash policies at all levels of firm's activities (James, 1999).

Therefore, it is important to know how decisions are made in family-owned firms because majority of firms in the GCC are family owned (Eulaiwi et al., 2016). I argue that high levels of family control reduce the need for holding cash. Thus, my first hypothesis is stated in the following form:

> $\boldsymbol{H_1}$ *Family controlled firms hold lower levels of cash as corporate cash holdings than non-family controlled firms.*

3.3.2 Family control, firm life cycle and cash holdings

A firm life cycle are distinct phases in a firm's evolution that are determined by factors such as managerial ability, competitive environment, financial resources, strategy choice and other macroeconomic factors (Dickinson 2011). These determinants are generally grouped into internal and external factors and a firm's characteristic features in relation to each of these factors determines what stage of the life cycle that the firm is at a given time. Miller and Friesen (1984) suggested five progressive life cycle stages namely, birth, growth, maturity, revival and decline stages. Gort & Klepper (1982) also acknowledged five life cycle stages but opted for a variation in nomenclature, preferring the stages to be named introduction, growth, mature, shake-out and decline. The characteristics of each stage vary and can be identified by variations in environment, strategy, structure and decision-making style (Miller & Friesen, 1984). However, Dickinson (2011) places emphasis on resource availability and management in particular cash flows in relation to operating, investment and other financial activities. Dickinson (2011) argues that firms can be grouped into five life-cycle stages: introduction, growth, mature, shake-out and decline. Each life-cycle stage affects the firm's profitability, growth and risks, which require different levels of cash flows relating to operations, investments and financing. Firms may exhibit negative cash flows at the introduction stage of the life cycle due to insufficient knowledge about potential costs and revenues

(Dickinson, 2011). At the growth and maturity stages, firms now have more information about costs and revenues in business operations; hence, increased investments lead to low levels of cash holdings. At the shake-out stage, returns on investments begin to diminish, as do operating cash flows. Finally, during the decline stage of the life cycle diminishing returns lead to decline in prices and hence negative cash flows.

Family controlled firms in the GCC capital market maintain managerial influence, particularly in the growth and maturity stages, because these are the stages when profit is maximised and there will be excess cash within the firm (Eulaiwi, Al-Hadi, Hussain, & Al-Yahyaee, 2018). As discussed above, excess funds may result in agency problems as managers divert cash for personal interests or to invest in non-profitable ventures (Jensen, 1986). Agency problems are not expected to occur at the introduction, shake-out or decline stages because these stages are characterised by low levels of cash holdings. The discrepancies in information about cost and revenue in the introduction stage, and the diminishing returns that lead to price reduction in the shake-out and decline stages, result in the low level of firm cash holdings (Dickinson, 2011). Evidently, family-controlled firms may also reduce cash holding at the introduction, shake-out and decline stages. Therefore, family-owned firms must especially influence managerial decisions during the growth and maturity stages to avoid retaining excess profits. Investments may be increased in the maturity stage as a result of family influence on management. Thus, they can maintain low cash levels within the firm to mitigate the agency problem (Anderson & Reeb, 2003; Liu 2011).

> ***H₂*** *The level of corporate cash holdings in family controlled firms varies across the life-cycle stages of the firm.*

3.4 Research design and measurement of variables

3.4.1 Sample selection

My sample covers data on non-financial firms listed in GCC capital markets, including Saudi Arabia (KSA), Bahrain (BAH), United Arab Emirates (UAE), Kuwait (KUW), Oman (OMN), and Qatar (QAT), during the period 2006–2016.[14] Financial and accounting data were obtained from Standard & Poor (S&P) Global database (Capital IQ) to calculate the measurements of firms' cash holdings and control variables. Corporate governance data was hand-collected from annual board reports and the websites of GCC

[14] 2006 was chosen as the base year because GCC firms began releasing corporate governance reports in 2006.

stock exchanges. Financial firms were excluded from my sample due to the different capital structures and unique accounting standards of these firms. To mitigate the effect of outliers, all continuous variables are winsorized at the 1st and 99th percentiles. Heteroscedasticity and serial correlation are eliminated by robust standard errors, which are also clustered by firms.

I start with an original sample of 3,286 firm-year observations (Table 3.1, Panel A). I then eliminate 72 observations related to cross-listed firms, 165 observations with missing data on control variables, and 1,229 observations with missing corporate governance data. The final sample consists of 1,691 year-firm observations.

Table 3.1, Panel B presents the distribution of the sample by countries, which shows that KSA and OMN are the predominant countries. They account for 40.86% and 35.48% of the sample, respectively. In addition, KSA and OMN have the highest proportions of family controlled firms (52% and 28%, respectively), while QAT has the lowest proportion of family controlled firms (2%). Table 3.1, Panel C shows the distribution of my sample by industry sectors. The material sector is the largest of the sector in my sample (28%), followed by the industrial (21%), consumer staples (18%), and consumer discretionary (13%) sectors.

Table 3.1 Sample Specifications

Panel A: Sample Selection	
Number of non-financial firms available in S&P Capital IQ for the GCC countries	3,286
Less:-	
Joint listed firms observation	(72)
Firms with unavailable annual report	(1,229)
Firms with missing values in control variables	(294)
Total firm-year observations	1,691

Panel B: Sample Distribution by Country (Frequency)				
Country	Family controlled firms	Non-Family controlled firms	Frequency	Percent
Kingdom of Saudi Arabia (KSA)	333	358	691	40.86
Oman (OMN)	176	424	600	35.48
United Arab Emirates (UAE)	52	139	191	11.3
Kuwait (KUW)	40	20	60	3.55
Bahrain (BAH)	25	34	59	0.49
Qatar (QAT)	14	76	90	5.323
Total	640	1,051	1,691	100

Table 3.1 (continued)

Panel C: Sample Distribution by Industry		
Industries	Frequency	Percent
Materials	466	27.56
Industrials	351	20.76
Consumer staples	299	17.68
Consumer discretionary	222	13.13
Energy	123	7.27
Utilities	90	5.32
Telecommunication services	83	4.91
Healthcare	45	2.66
Information technology	12	0.71
Total	1,691	100

Note: Panel A presents sample selection; Panel B presents the country distribution of the sample; and Panel C presents the industry distribution of the sample.

3.4.2 Measurement of variables

3.4.2.1 Dependent variable: Cash holdings

Consistent with previous studies (Bates et al., 2009; Harford et al., 2008; Opler et al., 1999), the level of corporate cash holdings is defined as the ratio of cash and marketable securities to net assets (*CASH_NA*), where net assets is the total of all assets minus cash and marketable securities.

3.4.2.2 Independent variable: Family control

Hand collected data from firm's annual reports, cooperate governance reports, stock market filings and firm's websites are used to determine the independent variables. GCC firms do not supply corporate governance reports, hence no corporate governance data base (Eulaiwi et al., 2016). Corporate governance reports and ownership section of firms usually provide data pertaining to family ownership. This data is essential in order to determine if family interests are represented by an external entity such as if founding family members make up an institution of owners which may not be stated otherwise in a corporate governance report (Eulaiwi et al., 2016).

Prior studies do not reach consensus on a benchmark by which firms are classified as family or non-family firms (Durán, Lozano, & Yaman, 2016). Primarily, a combination of ownership and managerial involvement of the family, including generational transfers, is a definitive characteristic of family firms (Astrachan, Klein, & Smyrnios, 2002). In addition, family control is based on the ownership of shares in the firm by family, on

family presence on the board of directors, or both (Anderson & Reeb, 2003). Families with majority shares play a prominent role in day-to-day management of the firm (La Porta et al., 1999). Consistent with previous studies, family-ownership concentration in my study is denoted by the degree to which controlling family members exercise power over the board's decision making (Anderson & Reeb, 2003; Villalonga & Amit, 2006). Superior voting power as a result of majority share ownership in firms allows families have greater influence over the board. Therefore, my family control variable (*FAMILY_D)* is a binary variable, coded 1 if a family member owns greater than 10% of the firm's share capital; otherwise it is coded 0.

3.4.2.3 Control variables

Consistent with previous studies, I control for institutional ownership, which is the ratio of shares owned by the institution to the outstanding shares *(INST_OWN)* (Harford et al., 2008; Kuan et al., 2011; Liu 2011). Government ownership *(GOV_OWN)* is also controlled for in my regression due to the agency problem when managers pursue political goals instead of maximising shareholder value (Boubakri, Cosset, & Saffar, 2012).

This study uses board independence and board size as control variables since cash holdings are affected by board structure (Harford et al., 2008). Information asymmetry between firms and investors can be reduced by the presence of independent directors on the firm's board (Ozkan & Ozkan, 2004). In contrast, protection of shareholders and viability of family businesses can be improved by external (or independent) board monitoring (Brenes, Madrigal, & Requena, 2011). Board independence (*IND_BSIZE*) is calculated as the ratio of the number of independent directors to the total number of directors on the board. As smaller boards are more effective in decision making (Yermack, 1996), this suggests that smaller boards can better monitor managerial behaviour, especially during periods of excess cash flow. Board size (*BSIZE*) is calculated as the natural logarithm of the total number of directors on the board.

Consistent with prior literature on cash holdings (Harford et al., 2008; Kuan et al., 2011; Kuan et al., 2012; Liu et al., 2015; Liu 2011; Opler et al., 1999), I also include other variables to control firm-specific effects. Firm size *(SIZE)* is calculated as the natural logarithm of total assets. I use total debt scaled by total assets to control for firm leverage *(LEV)*. *MTB* is calculated as the market value of equity divided by its book value. The ratio of cash from operations to total assets controls for cash from operations *(CFO)*. Net working capital (*NWC*) is computed as the difference between current assets and current liabilities minus

cash and cash equivalents, scaled by total assets. Research and development expenses scaled by sales *(R&D)* controls for financial distress costs. *CAPEX* is the capital expenditure scaled by total assets. Finally, *DIV* is the total dividends scaled by total assets.

3.4.2.4 Empirical model

I test the association between family controlled firms and cash holdings with this OLS regression:

$$\begin{aligned} CASH\_NA_{i,t} = {} & \beta_0 + \beta_1 FAMILY\_D_{i,t} + \beta_2 INST\_OWN_{i,t} + \beta_3 GOV\_OWN_{i,t} \\ & + \beta_4 IND\_BSIZE_{i,t} + \beta_5 BSIZE_{i,t} + \beta_6 SIZE_{i,t} \\ & + \beta_7 LEV_{i,t} + \beta_8 MTB_{i,t} + \beta_9 CFO_{i,t} + \beta_{10} NWC_{i,t} + \beta_{11} R\&D_{i,t} \\ & + \beta_{12} CAPEX_{i,t} + \beta_{13} DIV_{i,t} \\ & + Year\ Industry\ Countries\ Dummies + e_{i,t} \end{aligned} \qquad \text{(Equation 3.1)}$$

Note: All variables are explained above and in Appendix 3.1.

The impact of independent variables differs at various levels of cash holdings. It is not well captured by OLS regression because it focuses solely on the central tendency of the distribution of cash (Kuan et al., 2012). Therefore, I additionally apply quantile regression to determine the influence of family controllers on different distributions of cash holdings. The application of a quantile estimator reconciles some econometric issues such as non-Gaussian error distribution and sensitivity to outliers (Barnes & Hughes, 2002). This study analyses the levels of cash holdings at five quantiles: the 10th Q, 25th Q, 50th Q, 75th Q and 90th Q.

I also run (Equation 3.1) to estimate the association between family controlled firms and cash holdings over different stages of firm life cycles. Consistent with prior studies, I apply a separate analysis for each stage of the firm life cycle (i.e. introduction, growth, mature, shake-out and decline) to further validate the statistical power of the regression (Dickinson, 2011; Lu & Sapra, 2009). Using the firm life cycle model of Dickinson (2011), I classify my sample firms into five stages: INTRODUCTION if operating cash flows and investing activity cash flows are negative but financing cash flows are positive; GROWTH if operating cash flows and financing cash flows are positive but investing activity cash flows are negative; MATURITY if operating cash flows are positive, but investing activity cash flows and financing cash flows are negative; DECLINE if operating cash flows are negative, investing activity cash flows are positive and financing cash flows are either positive or negative; and SHAKE-OUT for the remainder of firms in my sample.

3.5 Empirical analyses

3.5.1 Descriptive statistics

Table 3.2, Panel A presents descriptive statistics for the variables in (Equation 3.1). Of the total net assets, cash holdings (*CASH_NA)* has a mean (median) of approximately 12% (7%). Moreover, cash holdings are positively skewed and the quantile regression efficiency is increased by the distribution of corporate cash (Kuan et al., 2012). On average, 31% of firms in my sample have family members owning more than 10% of the firm's share capital (*FAMILY_D*). Publicly traded firms in the GCC have an average institutional shareholding and government ownership of 22% and 14%, respectively. Firms in the GCC maintain a board size of about 8 directors and 63% of the directors remain independent. Firms in my sample have, on average, total assets of $2.9 billion, market-to-book ratio (*MTB*) of 1.5, capital expenditure to total assets (*CAPEX*) of 5.6%, leverage ratio (*LEV*) of 20%, and cash flows to total assets (*CFO*) of 8.3%. Overall, the descriptive statistics for my sample are consistent with those of previous studies (Durán et al., 2016; Eulaiwi et al., 2016; Harford et al., 2008; Kuan et al., 2011; Kuan et al., 2012).

Table 3.2 Descriptive Statistics

Panel A: Pooled Descriptive Statistics								
Variable	N	Mean	S.D.	25th%	50th%	75th%	Skewness	Kurtosis
CASH_NA	1691	0.118	0.154	0.030	0.067	0.154	4.526	43.212
CASH_NA ($MM)	1691	205	1004.5	2.89	13.7	58.2	9.941	116.217
FAMILY_D	1691	0.309	0.462	0.000	0.000	1.000	0.828	1.686
INST_OWN	1691	0.224	0.260	0.000	0.116	0.400	1.029	3.050
GOV_OWN	1691	0.142	0.214	0.000	0.000	0.200	1.595	4.393
IND_BSIZE	1691	0.626	0.288	0.400	0.625	0.889	-0.311	2.242
BSIZE	1691	7.931	1.783	7.00	8.00	9.00	0.688	4.595
SIZE ($MM)	1691	2852	10766	111	363	1193	7.723	75.704
LEV	1691	0.202	0.186	0.036	0.167	0.320	0.942	3.436
MTB	1691	1.523	0.805	1.022	1.294	1.760	2.052	7.979
CFO	1691	0.083	0.087	0.026	0.072	0.131	0.438	3.700
NWC	1691	0.058	0.150	-0.031	0.033	0.145	0.377	3.742
R&D	1691	0.000	0.005	0.000	0.000	0.000	29.115	995.383
CAPEX	1691	0.056	0.061	0.014	0.037	0.075	2.083	8.239
DIV	1691	0.035	0.046	0.000	0.021	0.048	2.140	8.295

Table 3.2 (continued)

Panel B: Difference of Means Tests

	Family controlled firms		Non-Family controlled firms			
	Mean	STD	Mean	STD	Difference	*t-statistic*
CASH_NA	0.083	0.105	0.134	0.169	0.050	6.30***
INST_OWN	0.170	0.207	0.248	0.278	0.079	5.79***
GOV_OWN	0.054	0.126	0.181	0.233	0.127	11.74***
IND_BSIZE	0.576	0.261	0.648	0.297	0.072	4.78***
BSIZE	7.577	0.071	8.089	0.053	0.512	5.50***
SIZE	4.387	1.526	4.793	1.913	0.406	4.29***
LEV	0.178	0.157	0.212	0.197	0.034	3.47***
MTB	1.565	0.899	1.505	0.758	-0.060	-1.42
CFO	0.073	0.090	0.087	0.086	0.014	3.03***
NWC	0.081	0.168	0.048	0.141	-0.032	-4.12***
R&D	0.000	0.002	0.001	0.006	0.000	1.06
CAPEX	0.059	0.065	0.055	0.059	-0.004	-1.19
DIV	0.032	0.043	0.036	0.047	0.004	1.75*
Introduction	0.102	.0132	0.073	0.008	-0.0288	-2.00**
Growth	0.192	0.017	0.211	0.0120	0.020	0.93
Maturity	0.546	0.022	0.563	0.015	0.017	0.65
Shake-out	0.123	0.014	0.116	0.009	-.006	-0.37
Decline	0.038	0.009	0.037	0.006	-0.002	-0.15

Panel C: Life Cycle-wise Using Different Models for Family and Non-family Controlled Firms

Variables	Mean Statistics	Introduction	Growth	Maturity	Shake-out	Decline
CASH_NA	Non-Family	0.109	0.115	0.134	0.185	0.127
	Family	0.048	0.070	0.089	0.105	0.087
	Combined	0.085	0.102	0.120	0.159	0.114
CASH_TA	Non-Family	0.074	0.098	0.111	0.143	0.117
	Family	0.044	0.065	0.079	0.098	0.064
	Combined	0.063	0.088	0.102	0.128	0.100
CASH2_NA	Non-Family	0.098	0.093	0.106	0.152	0.058
	Family	0.035	0.047	0.065	0.053	0.072
	Combined	0.074	0.080	0.093	0.120	0.062
CASH2_TA	Non-Family	0.064	0.077	0.085	0.113	0.051
	Family	0.032	0.043	0.056	0.048	0.053
	Combined	0.052	0.067	0.077	0.092	0.052
INST_OWN	Non-Family	0.299	0.229	0.258	0.225	0.186
	Family	0.230	0.175	0.162	0.164	0.106
	Combined	0.272	0.213	0.229	0.206	0.161
GOV_OWN	Non-Family	0.111	0.188	0.202	0.143	0.080
	Family	0.055	0.072	0.047	0.056	0.048
	Combined	0.090	0.155	0.155	0.115	0.070
IND_BSIZE	Non-Family	0.635	0.617	0.663	0.625	0.700
	Family	0.619	0.587	0.555	0.594	0.653
	Combined	0.629	0.608	0.630	0.615	0.685

Variables	Mean Statistics	Introduction	Growth	Maturity	Shake-out	Decline
BSIZE	Non-Family	7.988	8.154	8.119	8.000	7.744
	Family	7.377	7.650	7.632	7.469	7.300
	Combined	7.754	8.009	7.971	7.830	7.603
SIZE	Non-Family	4.201	5.468	4.719	4.524	4.060
	Family	4.498	4.626	4.413	4.252	2.962
	Combined	4.315	5.225	4.627	4.437	3.711
LEV	Non-Family	0.339	0.304	0.178	0.155	0.126
	Family	0.297	0.214	0.146	0.143	0.258
	Combined	0.323	0.278	0.169	0.151	0.168
MTB	Non-Family	1.507	1.404	1.529	1.611	1.378
	Family	1.215	1.470	1.696	1.300	1.939
	Combined	1.395	1.423	1.579	1.512	1.556
CFO	Non-Family	-0.046	0.066	0.123	0.074	-0.043
	Family	-0.042	0.062	0.117	0.036	-0.076
	Combined	-0.044	0.065	0.121	0.062	-0.053
NWC	Non-Family	0.001	0.014	0.055	0.079	0.131
	Family	0.068	0.040	0.087	0.129	0.073
	Combined	0.027	0.022	0.065	0.095	0.113
R&D	Non-Family	0.003	0.000	0.000	0.001	0.000
	Family	0.000	0.000	0.000	0.000	0.001
	Combined	0.002	0.000	0.000	0.000	0.000
CAPEX	Non-Family	0.063	0.105	0.044	0.024	0.021
	Family	0.050	0.100	0.058	0.029	0.027
	Combined	0.058	0.104	0.048	0.026	0.023
DIV	Non-Family	0.007	0.017	0.046	0.052	0.015
	Family	0.012	0.016	0.042	0.034	0.012
	Combined	0.009	0.016	0.045	0.046	0.014

Note: Panel A presents the descriptive statistics for the whole sample. Panel B presents the univariate tests for the mean difference between family controlled firms and non-family controlled firms. Panel C presents the difference of mean for life cycle-wise between family and non-family controlled firms. The definitions of variable are provided in Appendix 3.1. *, **, and *** represent significance at 10%, 5%, and 1%, respectively.

Table 3.2, Panel B shows the differences between family firms and non-family firms. Family firms have lower average cash holdings of 8% of the net assets compared with an average of 13% for non-family firms. Further, family controlled firms require lower levels of working capital (*NWC*), leverage (*LEV)*, and cash flows (*CFO)*. On average, institutional ownership is 17% in family firms, which is significantly lower than that in non-family counterparts (25%). The average government shareholdings are 5.4% for family firms and 18% for non-family firms. The number of independent directors and board size are also smaller in family firms.

Table 3.2, Panel C shows the life cycle-wise of Dickinson (2011) for both family and non-family controlled firms under different stages for corporate cash holdings.[15] All the

[15] Apart from the original measure of corporate cash holdings (*CASH_NA)*, I also introduce three different measures (*CASH_TA*, *CASH2_NA* and *CASH2_TA*) for robustness tests in Section 5.4.2.

models show cash holdings are lowest in the introduction stage and increase in the growth and mature stages for both family and non-family firms. For example, mean *CASH_NA* for family firms in the introduction, growth and maturity stages is 0.048, 0.070 and 0.089, respectively.

Figure 3.1 graphically displays four measures of corporate cash holdings (*CASH_NA*, *CASH_TA*, *CASH2_NA* and *CASH2_TA*) across the life-cycle stages of family firms. The graph shows an inverted U-shaped trend in *CASH_NA* and *CASH_TA* over the different stages.

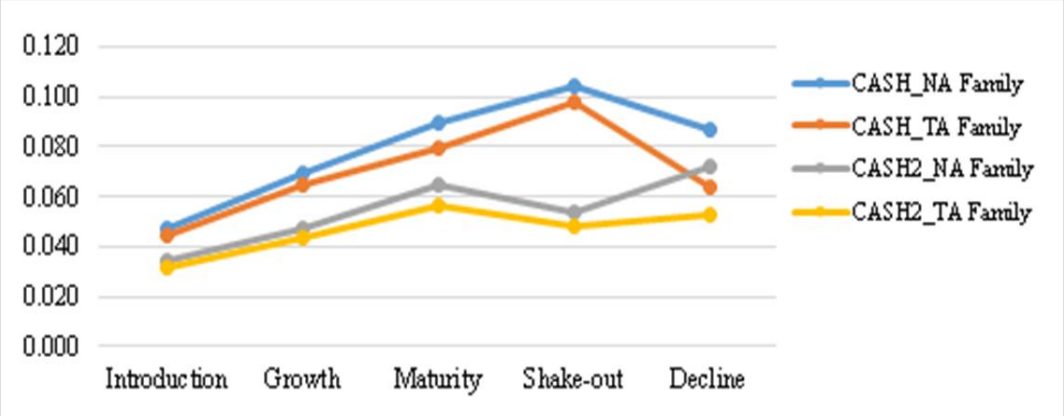

Figure 3.1 Life cycle-wise mean cash holdings for family controlled firms using different models

Figure 3.2 shows the life cycle-wise mean cash holdings for family firms versus non-family firms. The mean values of *CASH_NA* through the introduction, growth, maturity, shake-out and decline stages are 0.109, 0.115, 0.134, 0.185 and 0.127, respectively, in non-family firms, and 0.048, 0.070, 0.089, 0.105 and 0.087, respectively, in family firms. These results suggest that the average cash holdings of family firms are lower than those of non-family firms across all the life cycle stages of the firms.

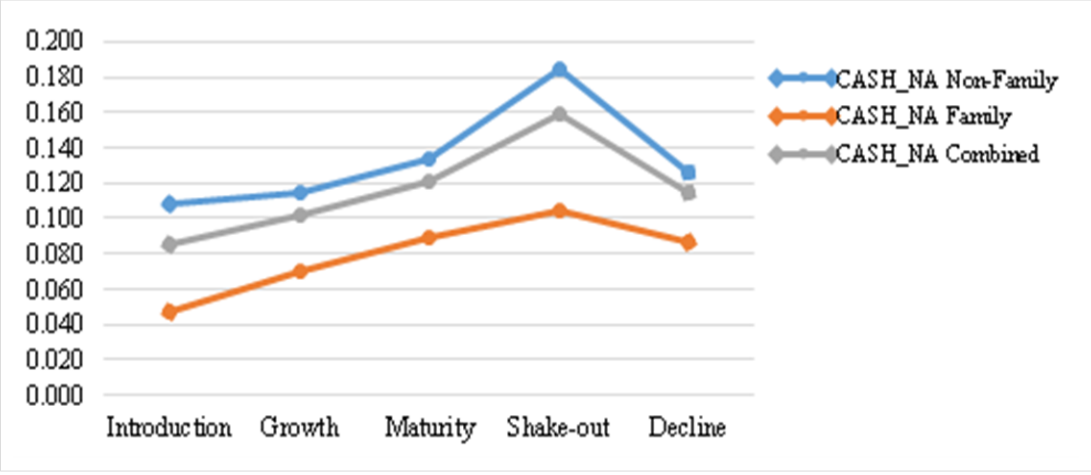

Figure 3.2 Life cycle-wise mean cash holdings for family and non-family controlled firms

Figure 3.3 displays the investment (*CAPEX*) over the firm life cycle stages, showing that *CAPEX* is more common in the mature stage (mean 0.058 for family firms vs 0.044 for non-family firms).

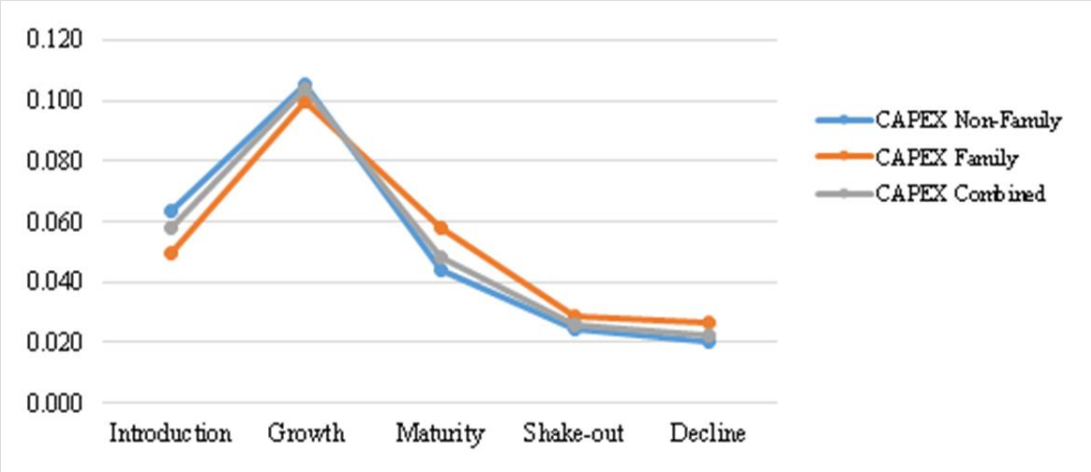

Figure 3.3 Life cycle-wise mean investment for family and non-family controlled firms

Table 3.3 Pearson Correlation Matrix

		[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]
[1]	CASH_NA	1													
[2]	FAMILY_D	-0.16***	1												
[3]	INST_OWN	0.07**	-0.14***	1											
[4]	GOV_OWN	0.11***	-0.27***	-0.24***	1										
[5]	IND_BSIZE	-0.037	-0.12***	0.18***	0	1									
[6]	BSIZE	-0.007	-0.13***	-0.15***	0.18***	-0.04	1								
[7]	SIZE	0.053*	-0.10***	-0.27***	0.33***	-0.35***	0.36***	1							
[8]	LEV	-0.32***	-0.08***	0.09***	-0.05*	-0.05*	0.05*	0.16***	1						
[9]	MTB	0.14***	0.035	-0.09***	-0.022	-0.14***	-0.004	0.041	-0.27***	1					
[10]	CFO	0.24***	-0.07**	0.015	0.14***	0.001	0.08***	0.08***	-0.30***	0.34***	1				
[11]	NWC	0.15***	0.10***	-0.015	-0.10***	0.06*	-0.19***	-0.11***	-0.34***	0.12***	0.029	1			
[12]	R&D	0.057	-0.026	0.014	-0.013	0.006	0.003	0.037	0.055*	0.032	-0.014	0.016	1		
[13]	CAPEX	-0.045	0.034	-0.037	0.10***	-0.06*	0.04	0.08***	0.05	0.13***	0.17***	-0.16***	0.034	1	
[14]	DIV	0.26***	-0.041	-0.021	0.11***	-0.03	0.10***	0.06*	-0.32***	0.50***	0.56***	0.14***	0.025	-0.011	1

Note: This table presents the Pearson correlations matrices among cash holdings, family control variable and all other variables of the regression analysis. The definitions of variables are provided in Appendix 3.1. *, **, and *** represent significance at 10%, 5%, and 1%, respectively.

3.5.2 Correlation analysis

Table 3.3 reports the Pearson correlation matrix of the main variables used in my baseline regression. Cash holdings (*Cash_NA*) is negatively correlated with family controlled firms (*FAMILY_D*). In addition, Cash_NA is significantly and positively correlated with INST_OWN, GOV_OWN, MTB, CFO and DIV, and is significantly and negatively correlated with LEV ($P \leq 0.05$).

3.5.3 Regression analysis

3.5.3.1 Association between family control and corporate cash holdings

Table 3.4 presents the results of the empirical research on the association between family controlled firms and cash holdings. According to Hypothesis 1, I predict the coefficient of *FAMILY_D* variable will be negative**.** In Column (1) of Table 3.4, the OLS estimation shows a significant negative relationship between family control and the level of cash holdings (estimated coefficient of –0.051, $p< 0.01$). As the central tendency of the distribution is the main focus of the OLS estimation, the effect of explanatory variables on cash decisions of firms with high and low levels of cash holdings are not considered (Kuan et al., 2012). Therefore, I used conditional quantile estimates (see Columns (2)–(6) of Table 3.4).

The level of cash holdings in family controlled firms is significantly lower across all levels of the quantile distribution (10th, 25th, 50th, 75th and 90th) than that of non-family firms. This result supports Hypothesis 1 that lower levels of cash holdings exist in firms with family control. It is consistent with the argument that there will be a policy of low cash holdings when family members influence managerial decisions in firms. Family control of firms helps mitigate the agency problem of free cash flows. In terms of economic significance, Column (1) of Table 3.4 shows that a change of one standard deviation in the *FAMILY_D* variable reduces the level of cash holdings (cash and marketable securities) by \$2.35.[16] My findings are consistent with the view that family controlled firms identify, monitor, and manage corporate cash-holding decisions.

For control variables, *IND_BSIZE* is not significantly related to cash holdings in the OLS regression, but the coefficients for 10th and 90th quantiles are significantly related to *IND_BSIZE*. *SIZE* and *CFO* variables are associated significantly and positively with cash holdings in the OLS model and the quantile regressions. The quantile estimated coefficient of *NWC* and *DIV* for the 25th, 50th and 75th quantiles are positively significant with cash

[16] This is calculated as 0.462 (standard deviation of *FAMILY_D)* * 0.051 (coefficient estimate of *FAMILY_D)* = 0.0236/1004.5 (standard deviation of cash and marketable securities).

holdings, while those for the 10th and 90th quantiles are not significant. However, leverage is negatively and significantly ($p< 0.01$) associated with cash holdings for all five quantile levels. The results of my control variable analyses are consistent with those of prior studies (Durán et al., 2016; Harford et al., 2008; Kuan et al., 2011; Kuan et al., 2012).

Table 3.4 Regression Results – The Effect of Family Control on Cash Holdings

Dependent Variable: CASH_NA						
Variables	**OLS**	**Quantile Regressions**				
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
		10th Quant	25th Quant	50th Quant	75th Quant	90th Quant
FAMILY_D	**-0.051*** **	**-0.012*** **	**-0.017*** **	**-0.033*** **	**-0.054*** **	**-0.061*** **
	(-3.16)	**(-5.31)**	**(-5.47)**	**(-6.49)**	**(-5.72)**	**(-3.06)**
INST_OWN	0.045	0.005	0.005	0.01	0.018	0.053*
	(1.42)	(1.12)	(0.93)	(1.02)	(0.99)	(1.65)
GOV_OWN	0.003	-0.002	0.013	0.012	-0.015	-0.048
	(0.10)	(-0.15)	(1.56)	(1.05)	(-0.82)	(-1.23)
IND_BSIZE	-0.021	-0.007*	-0.006	-0.01	-0.017	-0.066**
	(-0.86)	(-1.84)	(-1.17)	(-1.22)	(-0.97)	(-2.03)
BSIZE	-0.016	0.001	0.002	0.007	-0.018	-0.018
	(-0.49)	(0.15)	(0.35)	(0.62)	(-0.88)	(-0.47)
SIZE	0.016***	0.004***	0.006***	0.010***	0.014***	0.021***
	(2.92)	(4.44)	(5.37)	(5.53)	(4.76)	(3.55)
LEV	-0.241***	-0.033***	-0.052***	-0.118***	-0.197***	-0.339***
	(-5.11)	(-4.49)	(-5.68)	(-6.91)	(-7.86)	(-6.52)
MTB	0.005	-0.001	-0.001	-0.002	0.008	0.043**
	(0.47)	(-0.41)	(-0.27)	(-0.56)	(1.07)	(2.23)
CFO	0.119*	0.056***	0.107***	0.147***	0.156***	-0.022
	(1.92)	(3.57)	(4.05)	(3.46)	(2.92)	(-0.21)
NWC	0.016	0.009	0.026**	0.042**	0.104***	0.08
	(0.21)	(1.13)	(2.33)	(2.04)	(3.03)	(1.25)
R&D	0.711	0.189	0.21	0.817	1.739	-0.165
	(1.64)	(0.39)	(0.26)	(0.53)	(0.67)	(-0.07)
CAPEX	-0.111	-0.024	-0.041*	-0.095**	-0.072	0.001
	(-1.54)	(-1.29)	(-1.86)	(-2.50)	(-1.35)	(0.01)
DIV	0.186	0.045	0.123*	0.331***	0.256**	0.142
	(1.06)	(1.14)	(1.84)	(3.01)	(2.11)	(0.46)
Intercept	0.207**	0.025	0.015	0.110***	0.262***	0.358***
	(2.28)	(1.52)	(0.50)	(2.71)	(3.67)	(2.76)
YEAR Dummies	Yes	Yes	Yes	Yes	Yes	Yes
IND Dummies	Yes	Yes	Yes	Yes	Yes	Yes
COUNTRY Dummies	Yes	Yes	Yes	Yes	Yes	Yes
N	1691	1691	1691	1691	1691	1691
Adj./Pseudo: R-sq	0.254	0.078	0.099	0.158	0.218	0.254

Note: The numbers in the parentheses are robust *t*-statistics (OLS) with standard errors clustered by firm and bootstrap *t*-statistics (quantile). 1,000 bootstrap replications used in the quantile regressions. The definitions of variable are provided in Appendix 3.1. Standardized beta coefficients are reported. *, **, and *** represent significance at 10%, 5%, and 1%, respectively.

3.5.3.2 Association between family control, firm life cycle and corporate cash holdings

Table 3.5 presents the regression results from (Equation 3.1) with OLS estimates on the association between the family control, firm life cycles and cash holdings. My results indicate that *FAMILY_D* variable is negatively and significantly related to *CASH_NA* during the growth, maturity, and shake-out stages of the firm life cycle, but not in the introduction and decline stages. The coefficients of *FAMILY_D* are statistically significant ($p< 0.01$) during the growth, maturity and shake-out stages (0.046, 0.043 and 0.064, respectively). The coefficients of *FAMILY_D* change substantially from statistical insignificance to significance among the five stages of firm life cycles. These results support Hypothesis 2 that the influence of *FAMILY_D* on corporate cash holdings varies across the life-cycle stages of the firm. In the growth and maturity stages, family firms are motivated to mitigate the agency problem because of the high levels of cash holdings within the firm. This contrasts with the introduction and decline stages when cash holdings are low (Anderson & Reeb, 2003; Liu 2011).

Table 3.5 Regression Results – The Effect of Family Control, Firm Life Cycle and Cash Holding

Dependent Variable: CASH_NA					
Variables	**Subsample (1)**	**Subsample (2)**	**Subsample (3)**	**Subsample (4)**	**Subsample (5)**
	INTRO	GROWTH	MATURITY	DECLINE	SHAKEOUT
FAMILY_D	**-0.034**	**-0.046*****	**-0.043*****	**-0.019**	**-0.064*****
	(-1.41)	**(-3.11)**	**(-4.26)**	**(-0.26)**	**(-2.95)**
INST_OWN	-0.022	0.093***	0.058***	0.12	0.073
	(-0.53)	(2.69)	(3.14)	(1.06)	(1.11)
GOV_OWN	0.228*	0.006	-0.026	0.194	-0.006
	(1.67)	(0.18)	(-1.38)	(0.65)	(-0.12)
IND_BSIZE	-0.018	-0.003	-0.017	0.106	-0.144***
	(-0.50)	(-0.11)	(-0.86)	(0.56)	(-3.08)
BSIZE	-0.018	-0.046	-0.035*	-0.116	0.048
	(-0.25)	(-0.86)	(-1.75)	(-1.03)	(1.00)
SIZE	0.012	0.023***	0.016***	0.039	0.014
	(0.93)	(3.63)	(4.91)	(1.65)	(1.55)
LEV	-0.243***	-0.222***	-0.251***	-0.648**	-0.263***
	(-2.80)	(-3.45)	(-8.26)	(-2.04)	(-3.59)
MTB	0.009	0.004	-0.007	0.019	-0.005
	(0.34)	(0.20)	(-0.84)	(0.54)	(-0.37)
CFO	0.1	0.084	0.406***	-1.282*	0.506**
	(0.26)	(0.42)	(4.58)	(-1.78)	(2.25)

Dependent Variable: CASH_NA					
Variables	**Subsample (1)**	**Subsample (2)**	**Subsample (3)**	**Subsample (4)**	**Subsample (5)**
	INTRO	GROWTH	MATURITY	DECLINE	SHAKEOUT
NWC	-0.035	0.190**	-0.005	-0.231	0.093
	(-0.32)	(2.16)	(-0.11)	(-0.91)	(0.97)
R&D	0.345	2.092	0.547	18.664**	4.812
	(1.17)	(0.50)	(0.25)	(2.04)	(1.15)
CAPEX	-0.108	0.037	-0.331***	-2.468*	0.374
	(-0.53)	(0.43)	(-3.77)	(-1.95)	(0.81)
DIV	-0.351	0.216	0.069	-2.458	-0.006
	(-0.53)	(0.52)	(0.41)	(-1.47)	(-0.01)
Intercept	0.055	0.129	0.248***	0.052	0.092
	(0.32)	(0.87)	(4.35)	(0.16)	(0.92)
YEAR Dummies	Yes	Yes	Yes	Yes	Yes
IND Dummies	Yes	Yes	Yes	Yes	Yes
COUNTRY Dummies	Yes	Yes	Yes	Yes	Yes
N	138	347	943	63	200
Coefficient of Variation	35.369	32.006	32.322	44.049	38.498
Adj. R-sq	0.142	0.208	0.319	0.056	0.399

Note: This table reports the robust of OLS regression's results of cash holdings and family controlled firms using subsample of Dickinson's (2011) model of life cycle stages. The definitions of variable are provided in Appendix 3.1. Standardized beta coefficients are reported; *t*–statistics are reported in parentheses. *, **, and *** represent significance at 10%, 5%, and 1%, respectively.

3.5.4 Robustness checks

3.5.4.1 Association between family control and investment

I also examine whether *FAMILY_D* influences firms' investment, which is proxied by capital expenditures (*CAPEX*). Table 3.6, Panel A shows that *FAMILY_D* has a significant positive relationship with *CAPEX* in the OLS regression (Column (1)) and in conditional quantiles estimates (Columns (2)–(5)). Panel B presents the results with the life-cycle stages and shows that *FAMILY_D* is significantly and positively related to *CAPEX* only at the maturity stage ($p< 0.01$). My results are consistent with my assumption that family control reduces the cash holdings in the mature stage, thereby increasing the *CAPEX*. These findings suggest that *FAMILY_D* can increase the level of investment in firms.

Table 3.6 Regression Results – The Effect of Family Control on Investment (CAPEX)

Panel A: Quantile Regressions						
Variables	**OLS**	**Quantile Regressions**				
	(1)	**(2)**	**(3)**	**(4)**	**(5)**	**(6)**
		10th Quant	25th Quant	50th Quant	75th Quant	90th Quant
FAMILY_D	**0.014*** **	**0.004*** **	**0.006*** **	**0.011*** **	**0.017*** **	0.009
	(4.17)	**(3.59)**	**(3.45)**	**(3.64)**	**(3.67)**	(1.12)
CONTROLS	Yes	Yes	Yes	Yes	Yes	Yes
Intercept	Yes	Yes	Yes	Yes	Yes	Yes
YEAR Dummies	Yes	Yes	Yes	Yes	Yes	Yes
IND Dummies	Yes	Yes	Yes	Yes	Yes	Yes
COUNTRY Dummies	Yes	Yes	Yes	Yes	Yes	Yes
N	1691	1691	1691	1691	1691	1691
Adj./Pseudo: R-sq	0.158	0.068	0.086	0.117	0.139	0.201

Panel B: Family Control, Firm Life Cycle and Investment (CAPEX)					
Variables	**Subsample (1)**	**Subsample (2)**	**Subsample (3)**	**Subsample (4)**	**Subsample (5)**
	INTRO	GROWTH	MATURITY	DECLINE	SHAKEOUT
FAMILY_D	0.005	0.001	**0.019*** **	-0.005	0.006
	(0.46)	(0.07)	**(4.75)**	(-0.46)	(1.01)
CONTROLS	Yes	Yes	Yes	Yes	Yes
Intercept	Yes	Yes	Yes	Yes	Yes
YEAR Dummies	Yes	Yes	Yes	Yes	Yes
IND Dummies	Yes	Yes	Yes	Yes	Yes
COUNTRY Dummies	Yes	Yes	Yes	Yes	Yes
N	138	347	943	63	200
Adj. R-sq	0.283	0.231	0.255	0.162	0.212

Note: Panel A presents the robust *t*-statistics (OLS) with standard errors clustered by firm and bootstrap *t*-statistics (quantile). 1,000 bootstrap replications used in the quantile regressions. Panel B presents the results of OLS regression of capital expenditure and family controlled firms using subsample of Dickinson's (2011) model of life cycle stages. The definitions of variable are provided in Appendix 3.1. Standardized beta coefficients are reported; *t*–statistics are reported in parentheses. *, **, and *** represent significance at 10%, 5%, and 1%, respectively.

3.5.4.2 Alternative proxy measures of corporate cash holdings

In this section, I perform additional tests with other proxy measures of cash holdings that are commonly used in the literature. *CASH_TA* is calculated as the percentage of cash and marketable securities to total assets (Denis & Sibilkov, 2009; Opler et al., 1999; Ozkan & Ozkan, 2004). *CASH2_NA* is calculated as the percentage of cash and equivalents to net assets, where net assets equals the total assets minus cash and equivalents (Ferreira & Vilela, 2004). *CASH2_TA* is the percentage of cash and equivalents to total assets (Hardin, Highfield, Hill, & Kelly, 2009; Ozkan & Ozkan, 2004). Finally, *CASH_LN* is the logarithm of cash and marketable securities scaled over total assets (Faleye, 2004; Qiu & Wan, 2015).

Table 3.7 shows that *FAMILY_D* is significantly negatively related to all additional measures of cash holdings ($p< 0.01$), suggesting family controlled firms exhibit lower levels of cash holdings. These findings support the main results reported in Table 3.4.

Table 3.7 Regression Results – The Effect of Family Control on Additional Measures of Cash Holdings

Dependent Variable: Different Measures of Cash Holdings				
Variables	**(1)**	**(2)**	**(3)**	**(4)**
	CASH_TA	**CASH2_NA**	**CASH2_TA**	**CASH_LN**
FAMILY_D	**-0.034*** **	**-0.046*** **	**-0.032*** **	**-0.591*** **
	(-2.99)	**(-3.51)**	**(-3.72)**	**(-3.88)**
INST_OWN	0.024	0.059**	0.039**	0.386
	(1.12)	(2.26)	(2.34)	(1.42)
GOV_OWN	0.007	-0.012	-0.009	0.483
	(0.28)	(-0.44)	(-0.44)	(1.10)
IND_BSIZE	-0.016	-0.01	-0.007	0.129
	(-0.92)	(-0.47)	(-0.50)	(0.48)
BSIZE	-0.007	-0.012	-0.004	0.200
	(-0.32)	(-0.45)	(-0.21)	(0.65)
SIZE	0.011***	0.014***	0.010***	0.995***
	(2.76)	(3.28)	(3.29)	(15.96)
LEV	-0.160***	-0.222***	-0.149***	-1.351***
	(-5.41)	(-5.34)	(-5.72)	(-3.27)
MTB	0.003	0.003	0.001	-0.179**
	(0.35)	(0.40)	(0.30)	(-2.31)
CFO	0.099**	0.112*	0.097**	1.374***
	(2.34)	(1.95)	(2.58)	(2.64)
NWC	0.077	-0.168***	-0.100***	-0.589
	(1.42)	(-3.02)	(-2.95)	(-1.30)
R&D	0.425	0.752	0.474	4.307
	(1.48)	(1.44)	(1.36)	(0.97)
CAPEX	-0.062	-0.106*	-0.066	0.018
	(-1.17)	(-1.74)	(-1.54)	(0.03)
DIV	0.154	0.071	0.035	2.738**
	(1.25)	(0.44)	(0.34)	(2.09)
Intercept	0.144**	0.180**	0.122**	-1.157
	(2.36)	(2.19)	(2.30)	(-1.58)
YEAR Dummies	Yes	Yes	Yes	Yes
IND Dummies	Yes	Yes	Yes	Yes
COUNTRY Dummies	Yes	Yes	Yes	Yes
N	1691	1691	1691	1691
Adj. R-sq	0.278	0.261	0.278	0.792

Note: This table shows the results using different measures of cash holdings. The numbers in the parentheses are robust *t*-statistics (OLS) with standard errors clustered by firm. The definitions of variable are provided in Appendix 3.1. Standardized beta coefficients are reported. *, **, and *** represent significance at 10%, 5%, and 1%, respectively.

3.5.4.3 Alternative measures of family controlled firms

My next robustness test is to use five other measures of family control. The first measure is *FAMILY_P* (the ratio of family ownership to a firm's equity). Second, I introduce a binary variable (*FAMILY_FOUND)* if firms are founded by families. Third, a dummy variable (*FAMILY_CEO)* is created if the CEO or board chairperson is a family member. The fourth measure of family control is *FAMILY_MEM_P* (the number of family directors on the board divided by the total number of board directors). Finally, *FAMLY_INDEX* is an index of family control that is measured as the sum of the four family attributes (*FAMILY_D*, *FAMILY_FOUND*, *FAMILY_CEO*, and *FAMILY_MEM_DUMMY*), divided by the total expected score of these four variables. Table 3.8 shows that all additional measures of family control (*FAMILY_P*, *FAMILY_FOUND*, *FAMILY_CEO*, *FAMILY_MEM_P* and/or *FAMLY_INDEX)* are negatively and significantly related to *CASH_NA* ($p< 0.01$). Hence, my results are robust with different measures of family control.

Table 3.8 Regression Results – The Effect of Additional Measures of Family Control on Cash Holdings

Dependent Variable: CASH_NA					
Variables	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
FAMILY_P	**-0.153*** **				
	(-3.22)				
FAMILY_FOUND		**-0.056*** **			
		(-3.25)			
FAMILY_CEO			**-0.053*** **		
			(-3.54)		
FAMILY_MEM_P				**-0.113*** **	
				(-3.20)	
FAMILY_INDEX					**-0.088*** **
					(-3.78)
INST_OWN	0.043	0.051	0.053	0.048	0.038
	(1.32)	(1.59)	(1.61)	(1.45)	(1.20)
GOV_OWN	0.002	0.002	0.019	0.007	-0.01
	(0.05)	(0.06)	(0.57)	(0.21)	(-0.29)
IND_BSIZE	-0.023	-0.017	-0.015	-0.02	-0.022
	(-0.94)	(-0.71)	(-0.64)	(-0.82)	(-0.94)
BSIZE	-0.018	-0.014	-0.02	-0.007	-0.007
	(-0.56)	(-0.44)	(-0.60)	(-0.21)	(-0.21)
SIZE	0.017***	0.017***	0.016***	0.016***	0.016***
	(3.00)	(3.07)	(2.87)	(3.05)	(3.00)
LEV	-0.236***	-0.243***	-0.226***	-0.239***	-0.242***
	(-5.07)	(-5.06)	(-4.95)	(-5.14)	(-5.15)
MTB	0.005	0.005	0.007	0.007	0.007
	(0.50)	(0.51)	(0.70)	(0.63)	(0.63)

Dependent Variable: CASH_NA					
Variables	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
CFO	0.136**	0.130**	0.140**	0.132**	0.130**
	(2.17)	(2.13)	(2.23)	(2.13)	(2.13)
NWC	0.015	0.009	0.017	0.014	0.01
	(0.19)	(0.12)	(0.23)	(0.18)	(0.13)
R&D	0.763*	0.655*	0.669**	0.628*	0.572
	(1.66)	(1.95)	(2.00)	(1.85)	(1.61)
CAPEX	-0.115	-0.129*	-0.146*	-0.136*	-0.111
	(-1.58)	(-1.75)	(-1.90)	(-1.79)	(-1.54)
DIV	0.173	0.17	0.185	0.186	0.175
	(0.98)	(0.96)	(1.04)	(1.05)	(1.01)
Intercept	0.215**	0.200**	0.199**	0.185**	0.210**
	(2.27)	(2.15)	(2.12)	(2.08)	(2.33)
YEAR Dummies	Yes	Yes	Yes	Yes	Yes
IND Dummies	Yes	Yes	Yes	Yes	Yes
COUNTRY Dummies	Yes	Yes	Yes	Yes	Yes
N	1691	1691	1691	1691	1691
Adj. R-sq	0.251	0.251	0.245	0.249	0.261

Note: This table shows the results using different measures of family controlled firms. The numbers in the parentheses are robust *t*-statistics (OLS) with standard errors clustered by firm. The definitions of variable are provided in Appendix 3.1. Standardized beta coefficients are reported. *, **, and *** represent significance at 10%, 5%, and 1%, respectively.

3.5.4.4 Interaction of institutional ownership, government ownership and family control

This section extends the main analysis in (Equation 3.1) by including the interactions of *FAMILY_D*INST_OWN* and *FAMILY_D*GOV_OWN* in the regression model.[17] Ownership of the GCC typically consists of three groups of shareholdings, namely families, institutional investors and government institutions (Al-Shammari et al, 2008). Harford et al. (2008) find that institutional ownership and cash holdings are positively related in the U.S. as they contend that increased ownership of the institution dissuades excessive spending on value-destroying investment. Therefore, A higher institutional ownership level may encourage managerial entrenchment, which may lead to increase cash holdings. With regard to the government ownership, Choy, Gul and Yao (2011) suggest that the participation of government in the economy and financial intervention contributes to agency issues, because governments may use their power or ownership and control to benefit some parties and expropriate minority shareholder. Therefore, I expect that family control appears to further suppress the extent of other ownerships (i.e., government and institutional ownerships) and

[17] I also run each interaction (*FAMILY_D*INST_OWN* and *FAMILY_D*GOV_OWN*) in separate regression models and find the same results.

is consistent with the concept that family control is likely to be a significant determinant of business decision-making by firms in GCC, including decisions related to cash holdings.

Table 3.9 presents the results using different models of cash holdings. The coefficient of the interaction term, *FAMILY_D*INST_OWN*, is negatively and significantly related to cash holdings in all models at $p<0.01$ (Columns (1)–(4)). The interaction variable *FAMILY_D*GOV_OWN* is negatively and significantly associated to *CASH2_NA* and *CASH2_TA* (Columns (3)–(4)), but is insignificantly related to *CASH_NA* and *CASH_TA* (Columns (1)–(2)). My results suggest that the negative relationship of family control and cash holdings is further magnified in firms with high levels of institutional or government ownership.

Table 3.9 Regression Results – Interaction Between Family Control, Ownership Structure and Cash Holdings

Dependent Variable: Different Measures of Cash Holdings				
Variables	**(1)**	**(2)**	**(3)**	**(4)**
	CASH_NA	**CASH_TA**	**CASH2_NA**	**CASH2_TA**
FAMILY_D	**-0.024****	**-0.017*****	**-0.017****	**-0.012****
	(-2.56)	**(-2.59)**	**(-2.11)**	**(-2.09)**
INST_OWN	0.068***	0.036***	0.079***	0.051***
	(3.67)	(2.89)	(5.09)	(5.11)
GOV_OWN	0.008	0.007	-0.001	-0.001
	(0.40)	(0.50)	(-0.04)	(-0.03)
GOV_OWN* INST_OWN	0.022	0.038	0.030	0.037
	(0.37)	(0.90)	(0.57)	(1.04)
FAMILY_D* INST_OWN	**-0.139*****	**-0.087*****	**-0.123*****	**-0.085*****
	(-4.22)	**(-3.85)**	**(-4.94)**	**(-5.15)**
FAMILY_D* GOV_OWN	**-0.026**	**-0.017**	**-0.087*****	**-0.074*****
	(-0.62)	**(-0.55)**	**(-2.72)**	**(-3.32)**
IND_BSIZE	-0.022	-0.017*	-0.009	-0.007
	(-1.58)	(-1.84)	(-0.79)	(-0.88)
BSIZE	-0.014	-0.006	-0.007	0.003
	(-0.91)	(-0.57)	(-0.56)	(0.04)
SIZE	0.017***	0.012***	0.015***	0.010***
	(6.80)	(6.69)	(6.84)	(6.98)
LEV	-0.240***	-0.160***	-0.222***	-0.149***
	(-10.02)	(-10.69)	(-10.65)	(-11.61)
MTB	0.004	0.002	0.002	0.001
	(0.61)	(0.46)	(0.41)	(0.23)
CFO	0.115**	0.096***	0.105**	0.091***
	(2.24)	(2.77)	(2.36)	(3.19)
NWC	0.014	0.077***	-0.168***	-0.100***
	(0.38)	(3.02)	(-6.09)	(-5.91)

R&D	0.761*	0.460*	0.806*	0.516
	(1.95)	(1.82)	(1.67)	(1.56)
CAPEX	-0.099*	-0.054	-0.094**	-0.057*
	(-1.92)	(-1.49)	(-2.11)	(-1.92)
DIV	0.196	0.160*	0.081	0.043
	(1.51)	(1.95)	(0.74)	(0.64)
Intercept	0.185***	0.129***	0.152***	0.100***
	(3.94)	(3.93)	(3.70)	(3.71)
YEAR Dummies	Yes	Yes	Yes	Yes
IND Dummies	Yes	Yes	Yes	Yes
COUNTRY Dummies	Yes	Yes	Yes	Yes
N	1691	1691	1691	1691
Adj. R-sq	0.261	0.284	0.27	0.29

Note: This table provides the results of interaction terms between family control and other ownership structures (government and institutional ownership). The numbers in the parentheses are robust *t*-statistics (OLS) with standard errors. The definitions of variable are provided in Appendix 3.1. Standardized beta coefficients are reported. *, **, and *** represent significance at 10%, 5%, and 1%, respectively.

3.5.4.5 Propensity score matching (PSM)

I use the PSM technique to overcome the potential endogeneity problem in the main regression analysis (Shipman, Swanquist, & Whited 2016, Durán et al. 2016). This endogeneity problem may arise in firms where family controllers pursue their interests by choosing to participate only in business sectors with low cash holdings. The PSM approach allows comparison between family and non-family firms (Durán et al., 2016). In the logistic regression model, the dependent variable is the dummy variable representing family control. The optimal match is then selected from the predicted propensity scores deducted from the logistic regression using the nearest neighbour technique (NN) in order to differentiate between treated and untreated variables within my PSM sample. I also apply additional techniques to match propensity scores using Caliper 1% and Caliper 5%.

The first-stage analysis model for the PSM is presented in Column (1) of Table 3.10. Columns (2)–(4) present the second-stage regressions; *FAMILY_D* is negatively and significantly (p <0.01) related to cash holdings (proxied by *CASH_NA*). Therefore, my results are robust with the PSM technique. That is, lower cash reserves are strongly associated with family controlled firms in the GCC region.

Table 3.10 Regression Results – Propensity Score Matching (PSM)

Variables	First Stage	Second Stage (Cash_NA)		
	(1)	(2)	(3)	(4)
	FAMILY_D	Matching using Nearest-neighbour	Matching using Caliper (0.01)	Matching using Caliper (0.05)
FAMILY_D		**-0.047*** **	**-0.047*** **	**-0.046*** **
		(-2.99)	**(-3.06)**	**(-2.98)**
INST_OWN	-2.858***	0.032	0.039	0.032
	(-8.76)	(0.84)	(0.99)	(0.84)
GOV_OWN	-4.791***	0.067	0.075	0.067
	(-9.34)	(1.18)	(1.31)	(1.19)
IND_BSIZE	-0.901***	0.005	0.008	0.006
	(-3.23)	(0.18)	(0.26)	(0.21)
BSIZE	0.065	-0.049	-0.056	-0.049
	(0.20)	(-1.16)	(-1.39)	(-1.15)
SIZE	0.014	0.01	0.011	0.01
	(0.24)	(1.21)	(1.43)	(1.21)
LEV	-1.204**	-0.237***	-0.240***	-0.236***
	(-2.54)	(-4.74)	(-4.65)	(-4.71)
MTB	0.053	0.008	0.009	0.008
	(0.54)	(0.66)	(0.79)	(0.67)
CFO	-1.416	0.086	0.082	0.086
	(-1.58)	(1.12)	(1.07)	(1.11)
NWC	0.129	0.021	0.023	0.022
	(0.27)	(0.28)	(0.31)	(0.29)
R&D	-8.367	4.124	4.076	4.106
	(-0.57)	(1.02)	(1.01)	(1.02)
CAPEX	5.110***	-0.166**	-0.171*	-0.166**
	(4.77)	(-1.98)	(-1.95)	(-1.98)
DIV	-1.16	0.117	0.149	0.116
	(-0.61)	(0.50)	(0.64)	(0.50)
Intercept	1.211	0.218**	0.199**	0.216**
	(1.32)	(2.47)	(2.20)	(2.43)
YEAR Dummies	Yes	Yes	Yes	Yes
IND Dummies	Yes	Yes	Yes	Yes
COUNTRY Dummies	Yes	Yes	Yes	Yes
N	1608	700	669	698
Adj. (Pseudo) R-sq	(0.161)	0.181	0.193	0.181

Note: This table reports the results of endogeneity issue using PSM. The definitions of variable are provided in Appendix 3.1. Standardized beta coefficients are reported; *t*–statistics are reported in parentheses. *, **, and *** represent significance at 10%, 5%, and 1%, respectively.

3.5.4.6 Instrumental variables regression analysis (2SLS)

Another technique to address the endogeneity concern is the two-stage instrumental variable (2SLS) approach. This approach works only under a specific condition – correlation must exist between the instrumental variables and the endogenous regressor while the former must not correlate with the second-stage regression error term. In this study, exogenous variables are referred to as good instruments. An economic relation exists between exogenous variables and the family control proxy. However, there is no correlation between the exogenous variables and the error term of the second-stage regression that creates a relation between the cash holding and the family control. Following the literature (Eulaiwi et al., 2016; Halawi & Davidson, 2008), I adopt two instruments: (1) the number of directors on the board that belong to one of the 10 largest family groups, expressed in natural logarithm (*TOP10FAMILY* $_{(log)}$), and (2) the proportion of family directors on the audit committee (*FAMILY_AUDIT_P*).

Previous studies have identified the 10 largest family groups[18] in the GCC region and show that these families maintain positions in their firms (Eulaiwi et al., 2016; Halawi & Davidson, 2008). Therefore, family control may be related to one of these 10 family groups, regardless of whether board members have family ties with the actual family owners (Eulaiwi et al., 2016). The *TOP10FAMILY* $_{(log)}$ variable is positively correlated with the *FAMILY_D* variable. I also select the ratio of family directors on the audit committee as an instrument to assess the strength of family control. Increasing family participation in both management and the board of directors may expand its involvement in the board's subcommittees, including the audit committee. The involvement of family directors in the audit committee allows them to acquire company knowledge that enables the family to effectively monitor the management (Al-Okaily & Naueihed, 2019; Bartholomeusz & Tanewski, 2006).

Table 3.11, Panel A presents the results of the first-stage 2SLS, showing that the instrumental variables are positively associated with *FAMILY_D* ($P \leq 0.1$). *TOP10FAMILY*$_{(log)}$ and *FAMILY_AUDIT_P* are positively associated with *FAMILY_D* in the pooled sample (Column (1)) and during the growth and maturity stages of firm life cycle (Columns (2)–(5)). Table 3.11, Panel B presents the results of the second-stage 2SLS, showing that the coefficient of *FAMILY_D* is significantly negative for an association of cash holdings ($p \leq 0.05$) in the total sample and during the growth and

[18] Appendix 3.2 provides the surnames of these families for each country.

maturity stages of the firm life cycle. Hence, my original results in Table 3.4 remain robust with the 2SLS method.

Table 3.11, Panel C shows the suitability of my instrument variables by calculating post-estimation tests: under-identification, weak identification, Hansen's J–statistic over-identifying restrictions, and Durbin-Wu-Hausman's endogeneity. The excluded instruments are relevant because the results of the under-identification test (Anderson LM statistic) are statistically significant ($p < 0.01$) in all columns (1–5). The (corrected) value of the Cragg-Donald Wald F statistic (58.73) exceeds that of Stock and Yogo's (2005) critical value (19.93) at $p < 0.10$. Therefore, I can conclude that correlation exists between the excluded instruments and the endogenous regressors. However, Dickinson (2011) life cycle proxies have four endogenous regressors (measures for four life cycle stages) and therefore, Stock and Yogo (2002) in this circumstance cannot offer critical value. Angrist and Pischke (2008) proposed an approach (which was later modified by (Sanderson & Windmeijer, 2016)), that has been used for providing solution to this problem along with making a correct estimated version of the F statistic that works well with my chosen set of two endogenous variables. my estimates are not related to a weak instrument, as reflected by the Cragg-Donald Wald F statistic. In addition, the null hypothesis is not rejected under Hansen's J–statistic over-identifying restrictions tests in Column (1) of Panel C, suggesting that the instrument variables are valid, satisfactory and not over-identified. Finally, the use of 2SLS regression estimates is justified because the homogeneity of family control proxies ($p < .01$) is rejected by the Hausman (1978) test.

Table 3.11 Regression Results – 2SLS Regression Analysis

Panel A: First-Stage Regression Model of Family Ownerships and Validity of Instruments					
Variables	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
	OLS	**INTRO**	**GROWTH**	**MATURITY**	**DECLINE**
BIG10FAMILY(log)	**0.060****	-0.136	**0.186*****	**0.065***	-0.602*
	(2.21)	(-0.99)	**(2.84)**	**(1.78)**	(-1.85)
FAMILY_AUDIT_P	**0.743*****	0.936**	**0.644*****	**0.652*****	0.995**
	(9.66)	(2.55)	(4.00)	(6.10)	(2.20)
CONTROLS	Yes	Yes	Yes	Yes	Yes
Intercept	Yes	Yes	Yes	Yes	Yes
YEAR Dummies	Yes	Yes	Yes	Yes	Yes
IND Dummies	Yes	Yes	Yes	Yes	Yes
COUNTRY Dummies	Yes	Yes	Yes	Yes	Yes

Table 3.11 (continued)

Panel B: Second-Stage Regression Model of Cash Holdings on Family Ownerships					
FAMILY_D	**-0.135*** **	-0.06	**-0.080***	**-0.115*** **	-0.359***
	(-4.75)	(-0.50)	**(-1.87)**	**(-3.15)**	(-3.11)
CONTROLS	Yes	Yes	Yes	Yes	Yes
Intercept	Yes	Yes	Yes	Yes	Yes
YEAR Dummies	Yes	Yes	Yes	Yes	Yes
IND Dummies	Yes	Yes	Yes	Yes	Yes
COUNTRY Dummies	Yes	Yes	Yes	Yes	Yes
N	996	76	198	568	43
Adj. R-sq	0.207	0.178	0.293	0.269	0.18

Panel C: Post-Estimation Tests					
1. Underidentification Test					
Anderson LM statistic	108.884	10.487	31.303	50.440	14.962
p-value	0.000	0.005	0.000	0.000	0.001
2. Weak Identification Test					
Cragg-Donald Wald F statistic	58.731	3.282	14.929	25.777	3.735
Stock and Yogo (2002) critical value (10%)	19.930	19.930	19.930	19.930	19.930
3.Test of Overidentifying Restrictions					
Hansen's J–statistic	2.064	3.561	11.194	8.235	2.256
p-value	0.151	0.059	0.001	0.004	0.133
4. Endogeneity Test					
Durbin-Wu-Hausman tests	14.567	0.000	0.702	6.211	7.148
Chi-sq.(1) *p*-value	0.000	0.984	0.402	0.013	0.008

Note: This table provides the 2SLS regression results. The definitions of variable are provided in Appendix 3.1. Standardized beta coefficients are reported; *t*–statistics are reported in parentheses. *, **, and *** represent significance at 10%, 5%, and 1%, respectively. *TOP10FAMILY (log)* is the total number of directors on the board that belong to one of the 10 largest family groups. *FAMILY_AUDIT_P* is the ratio of total family directors on the audit committee.

3.5.4.7 Two-step system generalised method of moments (GMM)

My above analyses indicate that family controlled firms have a low level of cash holdings. However, the OLS regression estimates may be biased if family control is related to error term. Thus, I used the generalised method of moments (GMM) estimation for dynamic panel-data conceptualised by Arellano and Bover (1995) and Blundell and Bond (1998) to validate the interpretation of my main findings in Table 3.4. The GMM also avoids any endogeneity problems with omitted variables bias and unobservable heterogeneity.

In the GMM analysis, the dependent variable is the level of firm cash holdings (*CASH_NA*, *CASH_TA*, or *CASH_LN*), the independent variables are considered as endogenous variables, and the lagged dependent variable is treated as the instrument

variable. The results indicate that the relationship between family control and corporate cash holdings is robust (Table 3.12).

Table 3.12 also presents the results of Arellano-Bond tests for AR (1) and (2) and the Hansen test of over-identification restrictions. They show that the Arellano-Bond test for AR (1) serial autocorrelation is statistically significant. However, the Arellano-Bond test for AR (2) autocorrelation in first differences is not significant because the error terms are not serially correlated. The Hansen test of over-identifying restrictions is also statistically nonsignificant, suggesting that the instruments are valid in the dynamic panel-data two-step system GMM estimation.

Table 3.12 Regression Results – Blundell-Bond GMM Regression Analysis

Dependent Variable: Different Measures of Cash Holdings			
Variables	**(1)**	**(2)**	**(3)**
	CASH_NA	**CASH_TA**	**CASH_LN**
L.CASH	0.6583***	0.6789***	0.5566***
	(10.17)	(10.64)	(8.46)
FAMILY_D	**-0.0313****	**-0.0316****	**-0.6488*****
	(-2.02)	**(-2.49)**	**(-3.08)**
INST_OWN	-0.0031	-0.0096	0.0012
	(-0.32)	(-1.15)	-0.01
GOV_OWN	-0.0284**	-0.0255**	-0.106
	(-2.09)	(-2.35)	(-0.49)
IND_BSIZE	-0.0015	-0.0055	0.0141
	(-0.16)	(-0.74)	-0.13
BSIZE	-0.0266**	-0.0240***	-0.1973
	(-2.53)	(-2.85)	(-1.49)
SIZE	0.0126***	0.0094***	0.5238***
	(5.66)	(5.49)	(8.31)
LEV	-0.0621***	-0.0365**	-0.5722***
	(-2.86)	(-2.33)	(-2.83)
MTB	0.0011	0.0016	-0.1398***
	(0.22)	(0.51)	(-3.49)
CFO	0.3178***	0.2385***	2.1668***
	-7.85	-8.03	-6.2
NWC	-0.0584**	-0.025	-0.4548**
	(-2.36)	(-1.39)	(-2.20)
R&D	0.0016	-0.1048	-0.1306
	(0.01)	(-1.06)	(-0.09)
CAPEX	-0.3783***	-0.2617***	-0.8341**
	(-5.83)	(-6.26)	(-1.97)
DIV	-0.2814***	-0.2134***	-0.8029
	(-3.63)	(-4.15)	(-1.09)

Variables	(1)	(2)	(3)
	CASH_NA	CASH_TA	CASH_LN
Intercept	0.0781**	0.0698***	0.1082
	(2.42)	(2.83)	(0.31)
Arellano-Bond test for AR (1) (*p*-value)	0.005	0.000	0.000
Arellano-Bond test for AR (2) (*p*-value)	0.644	0.259	0.187
Hansen (*p*-value)	0.177	0.136	0.419
YEAR Dummies	Yes	Yes	Yes
IND Dummies	Yes	Yes	Yes
COUNTRY Dummies	Yes	Yes	Yes
N	1556	1556	1556

Note: This table provides the results of the GMM dynamic model. The definitions of variable are provided in Appendix 3.1. Standardized beta coefficients are reported; *t*–statistics are reported in parentheses. *, **, and *** represent significance at 10%, 5%, and 1%, respectively.

3.6 Conclusion

This study examines the influence of family control on the level of corporate cash holdings in the six GCC countries. I find that family controlled firms hold less cash across different measures of family control. I also evaluate firms' level of cash holdings across different stages of the corporate life cycle based on the Dickinson (2011) model. I show that, compared with non-family firms, family firms have significantly lower levels of cash in the growth, maturity and shakeout stages of the life cycle. In addition, family controlled firms have a higher level of investment in the maturity stage of their life cycle. My results remain consistent using different proxy measures of family control and corporate cash holdings, and pass various robustness tests for endogeneity.

Overall, the results of this study provide evidence that family controlled firms in developing markets such as the GCC countries tend to hold lower levels of cash than their non-family counterparts due to their ability to sustain a competitive advantage through family connections. My findings further suggest that family controlled firms reduce cash holdings to mitigate agency-related risks that may arise between managers and shareholders.

Appendices

Appendix 3.1 Definition of Variables

Variable name	Definition
Cash holding (CASH_NA)	The percentage of cash and marketable securities to net assets.
Cash holding (CASH_TA)	The percentage of cash and marketable securities to total assets.
Cash holding (CASH2_NA)	The percentage of cash and equivalents to net assets.
Cash holding (CASH2_TA)	The percentage of cash and equivalents to total assets.
Cash holding (CASH_LN)	The natural logarithm of cash and marketable securities to total assets.
Family measure (FAMILY_D)	A binary variable coded as 1 if family member owns more than 10% of firm's share capital, otherwise 0.
Family measure (FAMILY_P)	The percentage of family ownership of a firm's equity.
Family measure (FAMILY_FOUND)	A binary variable coded as 1 if firms are founded by families, otherwise 0.
Family measure (FAMILY_CEO)	A dummy variable of value 1 if the CEO or chairman is a family member, otherwise 0.
Family measure (FAMILY_MEM_P)	The total members of family directors on the board scaled by the total board directors
Family measure (FAMILY_MEM_DUMMY)	A binary variable coded as 1 if at least one member of family directors presents on the board, otherwise 0.
Family measure (FAMLY_INDEX)	An index of family control which is measured as the sum of the four family attributes (FAMILY_D, FAMILY_FOUND, FAMILY_CEO, and FAMILY_MEM_DUMMY), scaled by the total expected score of these four variables.
Institutional Ownership (INST_OWN)	Percentage of the outstanding shares owned by the institution investors.
government Ownership (GOV_OWN)	Percentage of the outstanding shares owned by the government investors.
Board Independence (IND_BSIZE)	Total board directors independence scaled by the total number of board directors.
Board size (BSIZE)	The natural logarithm of total number of directors on the board.
Firm size (SIZE)	The natural logarithm of total assets.
Firm Leverage (LEV)	Total debt of firm scales by total assets of firm.
Market-to-Book (MTB)	The market value of equity scaled to its book value.
Cash Flows (CFO)	The ratio of cash from operations to total assets of firm.
Working Capital (NWC)	The difference between current assets and current liabilities of firm minus its cash and cash equivalents scaled by total assets.
Research and development (R&D)	Research and development expenses scaled by sales.
Capital Expenditure (CAPEX)	The capital expenditures scaled by total assets.
Dividend (DIV)	The total dividends scaled by total assets.

Appendix 3.2 Big 10 Families Weighted by Market Value in GCC

KSA	OMN	UAE	KUW	BAH	QAT
Rajhi	Shanfari	Nahyan	Kharafi	Mashani	Thani
Issa	Rawas	Maktoum	Sabah	Khalifa	Mana
Mady	Sultan	Qassimi	Bahar	Mazrouq	Attiya
Saud	Lawati	Nuaimi	Rashed	Meer	Saad
Abanumay	Mashani	Mualla	Behbahani	Faivre	Ali
Faris	Busaidi	Dhaheri	Fulaij	Harthy	Naimi
Hakami	Harthy	Mazrouei	Ghanim	Khalili	Mannai
Husseini	Saleh	Qubaisi	Marafi	Murshidi	Mohannadi
Omran	Zawawi	Suwaidi	Sultan	Razak	Ansari
Rashid	Hassan	Otaiba	Nafisi	Yahyai	Sulaiti

Source: Halawi & Davidson (2008)

Chapter Four

4

Multiple Directorships, Firm Life Cycle and Corporate Financial Decisions: Evidence from the GCC Countries

4.1 Introduction

This study examines the effect of directors with multiple directorships (referred as "directors' busyness"[19]) on financial decisions in publicly listed firms in the Gulf Cooperation Council (GCC) countries. I further investigate how these effects change over firm life cycle stages. The influence of board of directors on corporate financing strategy is of relevance to a number of stakeholders including analysts, investors, and lenders (Adams & Ferreira, 2007; Harris & Raviv, 2008). Prior research focuses on two aspects of boards of directors, namely board size and board composition (e.g., Boone, Field, Karpoff, & Raheja, 2007; Guest, 2008; Lehn, Patro, & Zhao, 2009). However, the issue of board directors who hold multiple directorships (directors' busyness) has only received scant attention in the prior literature.

Prior research in this area shows that board member busyness may reduce firm performance (e.g., Ferris et al., 2003; Fich & Shivdasani, 2006; Jiraporn, Kim, & Davidson, 2008), decrease the effectiveness of outside board members as monitoring agents (Core, Holthausen, & Larcker, 1999), weaken corporate governance systems (Fich & Shivdasani, 2006; Jiraporn, Singh, & Lee, 2009), lead to financial-statement fraud (Beasley, 1996), provide opportunities to CEOs to increase their remuneration (Andres, Van Den Bongard, & Lehmann, 2013; Shivdasani & Yermack, 1999), and affect efficiency of firms (Gilson, 1990; Wilson, Wright, & Scholes, 2013). Previous studies also argue that directors with too many directorships diminish investor confidence and creditor trust (Cooper & Uzun, 2012; Fich & Shivdasani, 2006). Further, Armstrong, Guay and Weber (2010) indicate that directors with outside directorships can decrease the capability of the board, which may lead to more issues around information asymmetry and other market frictions. Shivdasani and Yermack (1999) contend that directors who sit on multiple boards may lead to higher agency costs.

GCC governance agencies have conducted several reviews of the risks related to board directors who hold multiple directorships (Council of Institutional Investors, 1998; Halawi & Davidson, 2008).[20] However, the effect of these directors on corporate value is

[19] Board directors' busyness is defined as members of a board who hold three or more outside board seats (Ferris, Jagannathan, & Pritchard, 2003; Fich & Shivdasani, 2006). To test robustness, I use four outside board seats as a cut-off point to define director busyness.

[20] For instance, the Council of Institutional Investors (1998) recommends that corporate directors should not hold more than two outside board seats. Similarly, the corporate governance codes in Saudi Arabia and Bahrain advocate that an individual hold no more than five or three outside board seats, respectively. Likewise, the Institute for Corporate Governance (Hawkamah, 2010) states that board directors with many outside board seats face challenges in devoting adequate time to all the companies they represent.

not clear given that there are also numerous benefits for firms where their directors hold external board positions. Therefore, this study examines the effect of multiple directorships on the firms' strategic decisions (cash holdings; capital expenditure; and selling, general, and administrative [SG&A] expenses)[21] and firm performance of publicly listed firms in GCC countries.[22] To the best of my knowledge, this study is the first to investigate the influence of the multiple directorships on financial decisions across firm life cycle stages.

Board members and their committees constitute an essential part of the governance structure of firms because they form the apex of decision making and set the tone within which business is conducted (Adams, Hermalin, & Weisbach, 2010; Hermalin & Weisbach, 1998). One of the key roles of the board of directors is monitoring (Jensen, 1993). This role requires the board to serve as a 'watchdog' to balance management incentives with shareholders' interests (Chen, 2008). Based on agency theory, the monitoring role of the board of directors can be influenced by directors' busyness (Falato, Kadyrzhanova, & Lel, 2014; Ferris et al., 2003; Fich & Shivdasani, 2006; Jensen & Meckling, 1976). This influence of directors' busyness on the monitoring role arises from their acceptance of too many outside board seats, which can cause serious difficulties regarding directors' fulfilment of their legally assigned responsibilities for each directorship. For example, board directors' busyness adversely affects individual director attendance at board meetings (Jiraporn, Davidson, DaDalt, & Ning, 2009). Over-commitment of board members to several directorship positions influences their ability to control management activities since the monitoring role of independent board directors is less effective when they hold multiple outside directorships (Fich & Shivdasani, 2006; Falato et al., 2014). Consequently, when CEOs are involved in appointing board directors, they may choose busy directors so that the monitoring of their activities will be lax (Shivdasani & Yermack, 1999). Because of their over-commitment, busy board directors are less effective in fulfilling their duties; they tend to challenge managerial proposals less frequently, are less active in monitoring and tend to have higher rates of absence from board meetings (Boubaker, Derouiche, & Nguyen, 2015; Jiraporn et al., 2009). Therefore,

[21] Following the literature, corporate financial decisions as directing strategic planning, decision making, formulation, implementation, and monitoring (Agha, 2016; Anderson, Banker, & Janakiraman, 2003; Chen, Lu, & Sougiannis, 2012; Gryglewicz, 2011). Financial decisions include capital investments, cash maintenance, and other strategic decisions that deal with cash flows.

[22] This study includes seven stock markets in six GCC countries: Saudi Stock Exchange (Tadawul) in Saudi Arabia, Muskat Securities Market (MSM) in Oman, Kuwait Stock Exchange (KSE) in Kuwait, Qatar Exchange (QE) in Qatar, Bahrain Stock Exchange (BSE) in Bahrain, and the Dubai Financial Market (DFM) and Abu Dhabi Securities Exchange (ADX) in the United Arab Emirates.

board members' busyness increases costs and creates difficulties in effectively monitoring management decision making and activities (Adams & Ferreira, 2007; Jiraporn et al., 2009; Shivdasani & Yermack, 1999). Board members must rely on insiders to provide information in order for them to evaluate management (Adams & Ferreira, 2007; Harris & Raviv, 2008). Hence, busy directors can be misled when evaluating management activities which may lead to poor financial decision making.

Previous studies have taken a static view of the busyness of boards and do not consider differences in the intensity of the directors' busyness across different stages of the firm life cycle. I investigate the effect of board busyness on financial decisions during the firm life cycle and thus respond to a call for further investigation of this aspect (Bonn & Pettigrew, 2009; Perrault & McHugh, 2015). Although the monitoring role of directors adds value to a firm, the importance of this function can differ throughout a firm's life cycle. This is because resourcing, strategic roles and implementation strategies can vary across life-cycle stages (Filatotchev, Toms, & Wright, 2006; Filatotchev & Wright, 2005). For instance, busy directors may not support firms well in the introduction, growth and maturity stages of their life cycle because these directors can offer limited monitoring functions to the firm. They are busy with matters on other boards, so the CEO fails to disclose information that allows busy directors to make sound financial decisions and to track CEO's financial decisions (Adams & Ferreira, 2007; Perrault & McHugh, 2015).

I choose the GCC countries as my setting to investigate the impact of directors' busyness on financial decisions and performance. I also examine the influence of these directors on financial decisions across firms' life cycle for several reasons. First, the capital markets in GCC countries differs from that in many countries in that the former are characterized by the high frequency of directors who hold multiple board positions (Al-Musalli & Ismail, 2012; Eulaiwi, Al-Hadi, Taylor, Al-Yahyaee, & Evans, 2016). Subsequently, the limited resources of busy directors, in terms of time and effort, suppresses their ability to monitor board activities (Yasin & Shehab, 2004) eventually contributing to poor governance practices and less effective investment decisions (Chou & Feng, 2019; Jiraporn et al., 2009). Additionally, these impediments can adversely affect the efficiency of directors relating to control of internal management (Morck, Shleifer, & Vishny, 1988). Hence, I argue that busy outside board directors reduce the quality of corporate financial decisions, which leads to higher cash holdings and lower capital expenditure, magnifies SG&A expenses and decreases financial performance.

Second, stock markets in GCC countries have expanded substantially. The number of listed firms increased from 473 in 2005 to 792 in 2018 (Agha & Eulaiwi, 2020).[23] Third, I am motivated by the environment of GCC countries due to their unique cultural, economic, political, and institutional characteristics. These countries are a subgroup of emerging economies which are usually smaller than developed economies, as well as less liquid and less organized (Agha & Eulaiwi, 2020; Bley & Saad, 2012). Since the 1970s, GCC governments have been involved in the economic growth processes of their countries by implementing open-door policies to diversify their economies away from oil dependence (Fasano & Iqbal, 2003).

Another unique feature of these countries is the absence of individual and corporate taxation which attracts the attention of foreign investors searching for higher returns and benefits (Bley & Chen, 2006). Moreover, the business environment in GCC countries differs from that in other parts of the world due to the political system. The countries are ruled by hereditary monarchies who run closed political systems (Al-Alkim, 1996). The presence of the monarchy in these oil-driven economies has allowed them to operate under legal dynamics that differ from the rest of the world (Mazaheri, 2013). Finally, compliance with corporate governance policies in many countries in the GCC is not mandatory; firms are not required to completely disclose their financial dealings because corporate governance is still in the development stage (Hawkamah, 2010). The lapses in inclusion of corporate governance in firm activities has promoted a lack of transparency, monitoring, and accountability in firms' dealings in the region, which has facilitated the dominance of CEO decision making. Hence, CEOs make decisions favorable to themselves that do not necessarily profit both minority and majority shareholders (Hawkamah, 2010).

Using a sample of 1,658 non-financial, publicly listed GCC firms over the period 2006–2016, I find that busyness of directors significantly affects corporate financial decision making. My findings show that directors with multiple directorships increase corporate cash holdings, indicating that firms with directors' busyness may miss new opportunities for investment and growth. I also find that these directors adversely affect capital expenditure: firms' with busy directors invest less than firms' without busy directors. In addition, directors' busyness significantly increases selling, general, and administrative (SG&A) expenses. Such inefficiencies are observed subsequently in firms with directors' busyness decreasing firm performance. I use Dickinson's (2011) life-cycle

[23] Further information is available from the GulfBase website [Link: http://www.gulfbase.com/].

measure, which divides firms into five phases of the life cycle based on their cash-flow patterns: the introduction, growth, mature, shakeout, and decline stages, to test changes in that directors' busyness and financing choices across firm life cycle progression. My empirical results suggest that the effect of directors' busyness on financial decisions differs significantly across firm's life-cycle stages. In particular, I find that directors' busyness contributes to an increase in cash holdings for firms in the introduction, maturity and shakeout stages, but reduces capital expenditure in the maturity and shakeout stages. Further, my analysis shows that directors' busyness increases SG&A expenses in the introduction and growth stages, and decreases firm performance in the introduction, growth and maturity stages. To mitigate concerns about endogeneity, I use alternative measures of financial decisions and directors' busyness, apply the two-step system generalized method of moments (GMM), propensity score matching (PSM) and the Heckman two-stage procedure (inverse Mills ratio). My reported results are robust for all of these measures.

This study is to the best of my knowledge, the first to conduct an analysis of the effects of director busyness on financial decisions during different stages of firms' life cycle, especially in the context of developing GCC stock markets. I contribute to the literature in several ways. First, I extend the literature on multiple directorships, life cycle stages of firms and corporate financial decision making (e.g., Ferris et al., 2003; Fich & Shivdasani, 2006; Habib, Bhuiyan, & Hasan, 2018; Hribar & Yehuda, 2015; Jiraporn et al., 2009). Although some of these studies indicate that strategic decision making and firm performance are profoundly influenced by firm life cycle stages, the influence of board directors, especially busy directors, on financial decision making across various stages of the life cycle remains unexplored.

Second, previous studies show that composition and size of the board are determined by several core characteristics of the firm (Boone et al., 2007; Guest, 2008; Lehn et al., 2009), but fails to acknowledge how the composition of the board is changed across various stages of the life cycle. A case study approach adopted by Huse and Zattoni (2008) using three Norwegian small companies illustrates board behavioral attributes across stages of life cycle progression. They call for further research as they raise a concern about their findings to be generalizable as board composition and board behavioral attributes vary and is subject to financial regulations and policies applied in different regions. My study replies to this call by employing a larger sample size of firms in a different setting i.e. the GCC region, considering board composition with the focus of how busy directors as members of the board influencing financial decisions across various corporate life cycle stages.

Third, I shed light on the agency costs that may arise if the directors hold too many outside board seats, which allows management to create information asymmetry for board directors and investors (Jensen & Meckling, 1976). I consider the notion of faultlines[24] from the social identity theory as a further hinderance of board member cohesion to the effect of busy directors, hence allowing managers' leeway to determine firms' financial decisions without proper board monitoring. Finally, my findings may have important implications for regulators, policymakers and investors operating in the GCC economy, western economies and other emerging economies. The results of my study may suggest a threshold for inclusion of board members with multiple directorships to insure effective oversight of financial decisions within firms.

In Section 2 of this study, I discuss the corporate governance setting of GCC countries. I review the literature and develop hypotheses in Section 3. In Section 4, I provide an overview of the data and sample. Section 5 presents the empirical results with additional analyses and the robustness checks. Section 6 concludes the research.

4.2 The institutional background of the GCC region

Six Arabic countries established the GCC alliance on 25 May 1981[25] with the goal of economic and financial integration (Espinoza, Prasad, & Williams, 2011).[26] The region boasts one of the fastest growing global economies through huge deposits of oil and gas that constitute 40–45% and 23%, respectively, of the world reserves (Al-Shammari, Brown, & Tarca, 2008; Espinoza et al., 2011). Publically and privately funded firms in the GCC region borrow extensively from financial institutions because of irregularities in their financial markets and the low trading volume of securities (Al-Yahyaee, Pham, & Walter, 2011). The oil boom of the 1970s strengthened the position of the economies and financial markets of the GCC countries (Agha & Eulaiwi, 2020). In the past two decades, the GCC market has attracted international investors through economic developments resulting from excessive oil and gas revenue (Al Janabi, Hatemi-J, & Irandoust, 2010). Recently GCC countries have attempted to diversify their oil-based economies by taking corporate, financial and legal institutional measures to promote private sector participation and providing cutting-edge technologies (Fasano & Iqbal, 2003).

[24] Faultlines are hypothetical disparities that split group members into homogenous sub groups as a result of similar ideologies of members of each sub group (Bezrukova, Jehn, Zanutto, & Thatcher, 2009; Lau & Murnighan, 1998).

[25] Saudi Arabia, United Arab Emirates, Oman, Kuwait, Qatar and Bahrain comprise the GCC countries.

[26] These member states share similar socioeconomic and geopolitical goals (Al-Malkawi, Pillai, & Bhatti, 2014).

Corporate governance is an important part of the business environment because it outlines the acceptable practices for firm transactions. The nature of the GCC region with its inclusion of cultural and complex institutional values in business dealings, makes corporate governance a major concern for professional researchers. Some regulatory bodies and institutions, however, have devised means to inculcate corporate governance into business activities (Al-Malkawi et al., 2014). The urgency to implement corporate governance measures emerged when several firms in the GCC region failed to fulfil their obligations to financial institutions (banks) during the global financial crisis. This failure led to the collapse of many GCC firms and in turn caused banks to insist on transparency, better corporate governance practices, and disclosure when dealing with GCC firms (Eulaiwi et al., 2016). Consequently, GCC firms improved their transparency in order to avoid similar collapse and to enable access to financial institutions.

Many government reforms in the GCC region have resulted from the establishment of corporate governance measures by legal and regulatory bodies. Hence, the GCC region is now the financial capital of the Middle East (Baydoun, William, Neal, & Roger, 2013). The benefits of including corporate governance practices in business dealings cannot be overlooked by foreign and minority shareholders; these practices offer them financial protection, allow more trust in investment opportunities, and diversify the economy (Callen, Cherif, Hasanov, Hegazy, & Khandelwal, 2014; Fasano & Iqbal, 2003). Thus, increased transparency and incorporation of corporate governance guidelines in business activities, in addition to new infrastructure and technologies, has liberalized and advanced the capital market in the GCC region (Fasano & Iqbal, 2003). The regulatory changes have encouraged local and foreign investors to participate in the capital market (Al Janabi et al., 2010), bolstering economic growth and development in the region.

4.3 Literature review and hypothesis development

4.3.1 Directors' busyness

"Directors' busyness" refers to members of the board of directors with greater or equal to three or more outside directorships (Ferris et al., 2003; Fich & Shivdasani, 2006; Jiraporn et al., 2008). Previous literature suggests that there are two views that explain the impact of directors' busyness: the reputation effect and the busyness effect. The former, in accordance with resource dependency theory, argues that busy directors increase the reputation of the directors themselves and the firm (Fama & Jensen, 1983), to obtain finance through their outside relationships during periods of financial distress (Gilson,

1990; Wilson et al., 2013) and to provide resources to firms so as to ensure that they function effectively (Field, Lowry, & Mkrtchyan, 2013). In contrast, the latter view (busyness effect) is built on agency theory tenets that purport that the engagement of busy directors can weaken board effectiveness. For example, directors with multiple directorships are more likely to miss board meetings (Jiraporn et al., 2009); to less effectively contribute to strength in corporate governance and in particular monitoring practices; to reduce firm value (Ferris et al., 2003; Fich & Shivdasani, 2006); to increase the probability of financial reporting fraud (Beasley, 1996); to promote deep portfolio diversification which has the potential to reduce firm performance (Andres et al., 2013; Cashman, Gillan, & Jun, 2012; Jiraporn et al., 2008); to lessen the incentive to receive auditor recommendations (Hunton & Rose, 2008); and to increase CEO compensation (Andres et al., 2013; Core et al., 1999).

It is evident in the GCC countries that busy directors are more commonly used than in other capital markets (Al-Musalli & Ismail, 2012; Eulaiwi et al., 2016). Consequently, the busyness effect takes precedence over the reputation effect in terms of time and effort. The limited resources of these busy board directors prevent them playing a significant role in board activities (Yasin & Shehab, 2004) which ultimately leads to poor corporate governance practices and corporate decisions (Chou & Feng, 2019; Jiraporn et al., 2009). In addition, time availability can adversely affect the effectiveness of monitoring internal management (Morck et al., 1988). Therefore, I argue that directors' busyness reduces the efficiency of corporate financial decisions, resulting in higher cash holdings and SG&A expenses, lower capital expenditure, and poorer financial performance.

4.3.2 Hypotheses development

4.3.2.1 Cash holdings and directors' busyness

Based on agency theory, the role of the board of directors can be influenced by board-member busyness, that is, the number of board memberships that a director holds (Falato et al., 2014; Ferris et al., 2003; Fich & Shivdasani, 2006). This impact is explained by time limitations on busy board members due to their multiple memberships, which poses serious difficulties for fulfilling their legally assigned responsibilities for each directorship (Walsh & Seward, 1990). For example, board-member busyness negatively affects individual director attendance at board meetings (Jiraporn et al., 2009). Consequently, busy board directors are less effective in fulfilling their duties regarding strategic decisions on cash management: their involvement in challenging managerial proposals is limited,

which may lead eventually to increased cash holdings. Further, directors ought to convey their expertise to their firms in form of expert advice and to play an important role in monitoring management activities (Adams et al., 2010). However, over-commitment by board directors to a number of firms affects their ability to monitor management activities (Fich & Shivdasani, 2006). Falato et al. (2014) support this argument; they document that the monitoring role of independent board members is less effective when they hold multiple directorships. Therefore, when CEOs are involved in the appointment of board members, they tend to choose busy directors for loose monitoring of their activities (Shivdasani & Yermack, 1999). Beasley (1996) concludes that a high number of busy directors on a board increases the possibility of accounting fraud as a result of poor monitoring. Busy directors are not typically penalized for low quality services or dismissed because they are close to retirement (Perry & Peyer, 2005; Ferris et al., 2003). These additional board appointments provide an avenue to earn more money before retirement. A high proportion of busy directors in the boardroom lowers the effectiveness of the board's monitoring processes, thus lowering overall effectiveness of the governance within the firm (Fich & Shivdasani, 2006). In support of this argument, Kalcheva and Lins (2007) argue that low-quality corporate governance in environments with less strict investor protection may result in higher cash holdings.

> $\boldsymbol{H_{1a}}$ *Firms that have boards with busy directors have a higher level of cash holdings.*

4.3.2.2 Capital expenditure and directors' busyness

The ineffectiveness of busy board members' advisory role may lead to poor capital expenditure decisions. In support of this view, Chen and Chen (2012) argue that the time limitations of busy board directors lead to inefficient evaluation of alternative investment opportunities for the firms on whose boards they serve. Further, the concept of faultlines deduced from the social identity theory by Kaczmarek, Kimino, and Pye (2012) has an effect on the cohesiveness of board members. Under this perspective, the appointment of busy directors on a firm's board increases the salience of division among board members, hence negating the effectiveness of board members in terms of quality of advice required for efficient decision making as regards capital expenditure (Kaczmarek et al., 2012).

In addition, poorly performing management teams can hold their positions if the evaluation process is defective, resulting in an accumulation of poor-quality decisions (Tarkovska, 2013). In particular, investment-related decisions need deep discussion and

understanding of the investment alternatives and surrounding circumstances. Giroud and Mueller (2010) also contend that firms with weak governance practices are more likely to experience negative effects on their investment decisions. However, it is likely that founders of these firms have built-in measures to check management behavior based on the coercive power theory postulated by French and Raven (1959) which leans on the valence of threatened punishment i.e., the risk of embarking of self-serving endeavours with firm's capital highly outweighs the reward. This would ensure that regardless of the level of monitoring of busy directors at any given period capital expenditure will be reduced and agency problem averted.

> $\boldsymbol{H_{1b}}$ *Firms that have boards with busy directors have a lower level of capital expenditure.*

4.3.2.3 Selling, general, and administrative (SG&A) expenses and directors' busyness

The potential increase in SG&A expenses is another adverse effect of director busyness. SG&A expenses typically include expenses such as salaries, travel, supplies, insurance, commissions, office functions, advertising, rent, stationary, and entertainment. Studies show these expenses are not influenced by economic ramifications but rather by agency problems (Chen, Lu, & Sougiannis, 2012). This agency problem arises as a result of as excessive free cash flows within the company (Jensen, 1986; Masulis, Wang, & Xie, 2007). Jensen (1986) postulates a mismatch of the agency problem and SG&A cost asymmetry fueled by free cash flows. The presence of busy directors may allow managers succumb to overinvest in operational costs such as SG&A when there is excess free cash flows. Hence a splurge in SG&A expenses can signal an increase in output demand and also greater SG&A cost asymmetry (Anderson et al., 2003; Banker, Byzalov, Ciftci, & Mashruwala, 2014). The SG&A cost asymmetry and the agency problem is visible in firms where weak corporate governance mechanisms exist, as seen in the GCC countries (Agha & Eulaiwi, 2020; Larcker, Richardson, & Tuna, 2007). Chen et al., (2012) associate the misappropriation of funds for SG&A expenses with agency problems resulting from lack of supervision by busy directors and existing weak governance regulations. I hypothesize that busy directors on the board will increase SG&A expenses.

> $\boldsymbol{H_{1c}}$ *Firms that have boards with busy directors have a higher level of SG&A expenses.*

4.3.2.4 Firm performance and directors' busyness

Busy board directors tend to attend fewer board meetings, which in turn affects accuracy of information regarding discussions in board meetings. These directors must rely on other sources of information such as insiders (Cashman et al., 2012; Jiraporn et al., 2009). Therefore, busy directors' understanding of concurrent circumstances of the firm's operations and the application of the board's strategic plans can be faulty, resulting in misevaluation of management activities (Fich & Shivdasani, 2006). For example, Core et al. (1999) found that, with busy directors on the board, CEOs are compensated with inflated remuneration packages, to the detriment of firms' performance. Moreover, the negative effects of busy directors can also extend to the overall performance of the firm (Ahn, Jiraporn, & Kim, 2010; Brown, Dai, & Zur, 2019; Falato et al., 2014; Fich & Shivdasani, 2006; Hauser, 2018); arguably, therefore, busy directors may be less committed to serving the firm's interest because they assign insufficient time to fulfilling their duties.

In light of this body of evidence about busy directors' effects on firms' governance and decision making (e.g., Ahn et al., 2010; Brown et al., 2019; Core et al., 1999; Hauser, 2018; Jiraporn et al., 2009; Shivdasani & Yermack, 1999), I argue that busy boards can contribute to lower firm performance.

H_{1d} *Firms that have boards with busy directors have a lower level of firm performance.*

4.3.2.5 Financial decisions, firm life cycle, and director's busyness

The theory of firm life cycle progression states that firms experience systematic changes in financial decisions and activities, operating and investing activities, risk appetite, resourcing and organizational capacities during different stages in their life cycle (Helfat & Peteraf, 2003). Prior literature proposes that financial decisions are more risky and less profitable in the introduction and decline stages but are less risky and more profitable in the growth and mature stages (DeAngelo, DeAngelo, & Stulz, 2006; Dickinson, 2011; Hasan, Hossain, & Habib, 2015; Hribar & Yehuda, 2015; Richardson, 2006). It is reasonable to expect that these differences will affect the type of financial decisions across each stage of the firm life cycle while directors with multiple directorships serve on a firm's board. Extant literature argues that corporate governance criteria are related to changes from one stage to another in the firm's life cycle (Filatotchev et al., 2006). Further, the board of directors is an essential corporate governance mechanism for

monitoring management, approving financial decisions, hiring and firing high-level management, and maintaining transparency in financial reporting (Adams et al., 2010; Hermalin & Weisbach, 1998). Habib et al. (2018) suggest that control of management is important. Avoiding self-interested behaviour of managers requires careful oversight by advisory, independent, or non-executive directors who are not too busy and have no financial interest in the company. Furthermore, the presence of faultlines in an existing board of directors consisting of multiple busy directors would affect task relations, social relations and perceived unity of the board (Kaczmarek et al., 2012). These faultlines inhibit the ability of the company's board of directors to offer quality advice and monitor company's affairs.

Directors with multiple directorships are associated with weak governance mechanisms as these busy board members lack the time for sufficient oversight of management. Therefore, I premise in this study that directors' busyness contributes to weak corporate governance practices that may lead to poor financial decision making. These poor decisions both increase cash holdings and SG&A expenses and decrease capital expenditure and firm performance. Thus, I hypothesize the following:

H_{2a} *All else being equal, firms that have boards with busy directors across life cycle stages have a higher level of cash holdings.*

H_{2b} *All else being equal, firms that have boards with busy directors across life cycle stages have a lower level of capital expenditure.*

H_{2c} *All else being equal, firms that have boards with busy directors across life cycle stages have a higher level of SG&A expenses.*

H_{2d} *Due to the interest alignment impact, firms that have boards with busy directors induce a varying relation between firm performance and different life cycle stages.*

4.4 Research design

4.4.1 Data sample

The cross-sectional dimension of the sample covers firms listed in GCC capital markets, including those in Saudi Arabia, Bahrain, United Arab Emirates, Kuwait, Oman, and Qatar, during the period 2006 to 2016.[27] Financial and accounting data are mainly

[27] I chose 2006 as the base year because disclosure of corporate governance reports of GCC firms began in 2006.

drawn from S&P Global's database (Capital IQ) and are used to calculate the measurements of firms' cash holdings, capital expenditure, financial performance, SG&A expenses, and other control variables. Data pertaining to corporate governance was hand-collected from annual board reports and the websites of GCC stock exchanges. I started with 3,286 firm-year observations (Table 4.1, Panel A). I then eliminated 72 observations related to cross-listed firms, 327 observations with missing data for control variables, and 1,229 observations with missing corporate-governance data. The final sample contains 1,658 firm-year observations. I excluded financial firms from my sample due to the unique accounting standards and the different capital structures of these firms. All the continuous variables have been winsorized at the 1st and 99th percent in order to mitigate the influence of outliers.

Table 4.1 Sample Specifications

Panel A: Sample Selection	
Number of non-financial firms available in S&P Capital IQ for the GCC countries	3,286
Less:	
Joint-listed firms observation	(72)
Firms with unavailable annual report	(1,229)
Firms with missing values in control variables	(327)
Total firm-year observations	**1,658**

Panel B: Sample Distribution by Country (Frequent of Directorships)		
Country	**Percentage of Busy directors**	**Percentage of Directors Who Hold Four or More Directorships**
Saudi Arabia	37.59	39.05
Oman	33.54	11.99
United Arab Emirates	13.72	22.44
Qatar	7.79	13.75
Bahrain	4.11	7.04
Kuwait	3.24	5.72
Total	**100**	**100**
Number of busy directors	1,604	909

Table 4.1 (continued)

Panel C: Sample Distribution by Industry (Frequent of Directorships)		
Industries	**Percentage of Busy Directors**	**Percentage of Directors Who Hold Four or More Directorships**
Materials	28.18	28.04
Industrials	20.14	16.82
Consumer staples	17.27	21.34
Consumer discretionary	13.28	14.64
Energy	6.80	6.23
Telecommunication services	5.11	6.85
Utilities	4.68	1.40
Health Care	3.37	4.52
Information technology	1.18	0.16
Total	**100**	**100**

Note: Panel A presents sample selection; Panel B presents the distribution of the board seats held by busy board directors by country; and Panel C presents the distribution of the board seats held by busy board directors by industry.

Table 4.1, Panel B reports the distribution of directors with outside board seats and directors with four or more outside directorships on the boards of firms in the GCC countries. Saudi Arabia and Oman are the countries with the highest percentage of board members who hold outside directorships (38% and 34%, respectively). Kuwait has the lowest percentage of directors with outside directorships (3%). Saudi Arabia and United Arab Emirates have the highest proportion of directors who hold four or more directorships. Table 4.1, Panel C shows the distribution of busy directors among various industry sectors. In my sample, materials sector has the highest percentage of both board seats held by directors with outside directorships (28%) and by directors who hold four or more outside directorships (28%).

4.4.2 Variable description

4.4.2.1 Dependent variables

Following previous studies (e.g., Agha & Eulaiwi, 2020; Anderson et al., 2003; Opler, Pinkowitz, Stulz, & Williamson, 1999; Richardson, 2006), I consider four dependent variables in this study: corporate cash holdings; capital expenditure; SG&A expenses; and firm performance. I measure cash holdings, in accordance to prior literature, by using the ratio of cash and marketable securities to the firm's total assets (*CASH_TA*). Investment used in this analysis is measured as capital expenditure divided by total assets (*CAPEX_TA*). SG&A expenses are calculated as SG&A expenses divided by sales

(*SG&A*). Tobin's Q is a market-based measure of firm performance and calculated as the book value of the firm's liabilities plus the market value of the firm's equity divided by the book value of the firm's total assets (*Tobin's Q*).

4.4.2.2 Explanatory variables

Following prior research (Ferris et al., 2003; Fich & Shivdasani, 2006; Jiraporn et al., 2008), I use four measures to capture multiple directorships, that is, board directors' busyness. The first measure is *Busy_Bsize* which is calculated as the total number of directorships held by each of the board directors divided by the board size. This calculation captures insider and outside busyness directors, so that the volume of their control may be a noisy indicator (Fich & Shivdasani, 2006). The second measure, $Busy_{(log)}$, is defined as the natural logarithm of multiple directorships that are held by board directors. The third measure, *Busy04*, captures the proportion of busy directors calculated as the percentage of total number of directors who hold four or more outside directorships. The fourth measure of director busyness, $Busy04_{(log)}$, is the natural logarithm of the total number of directorships that held by directors who have four or more outside directorships.

4.4.2.3 Control variables

I use number of control variables that are often used in the prior literature (e.g., Agha & Eulaiwi, 2020; Chen et al., 2012; Chen & Chen, 2012; Eulaiwi et al., 2016; Ferris et al., 2003; Fich & Shivdasani, 2006; Opler et al., 1999). I control for governance variables that may have an influence on the busyness of a firm's directors: the board size (*Bsize*), the proportion of independent directors (*Ind_Bsize*) and the frequency of the firm's board meetings (*B_Meeting*). Additionally, consistent with some studies (e.g., Al-Shammari et al., 2008; Dittmar & Mahrt-Smith, 2007), I control for ownership variables: CEO ownership (*CEO_OWN)*, and family ownership (*FAM_OWN)*. In addition, I also control for a number of firm financial characteristics such as firm size ($Assets_{(log)}$), firm leverage (*Leverage*), asset tangibility (*NPPE*), cash from operations (*CFO)*, firm growth (*Sales_Growth)*, profitability (*EBITDA*), net working capital (*NWC)*, dividends (*DIV)*. I include year dummies and firm fixed effects as controls in the regressions since they are constant at the level of firm and year, respectively. Definitions of all variables are in Appendix 4.1.

4.4.3 Empirical model

I estimate the following empirical regression to test the association between board members' busyness and financial decisions, including cash holdings, capital expenditure, firm performance, and *SG&E* using a fixed effects model:

$$Y_{it}=\alpha+\beta_1 X_{it}+\beta_2 Bsize_{it}+\beta_3 Ind\_Bsize_{it}+\beta_4 BMeeting_{it}+\beta_5 CEO\_OWN_{it}+\beta_6 FAM\_OWN_{it}+\beta_7 Assets_{(log)_{it}}+\beta_8 Leverage_{it}+\beta_9 NPPE_{it}+\beta_{10} CFO_{it}+\beta_{11} Sales\_Growth_{it}+\beta_{12} EBITDA_{it}+\beta_{13} NWC_{it}+\beta_{14} DIV_{it}+Year\ Dummy\ and\ Firm\ Fixed\ Effect+\varepsilon_{it} \quad \text{(Equation 4.1)}$$

where $Y_{i,t}$ is the dependent variable denoting to *CASH_TA*, *CAPEX_TA*, *SG&A*, and *Tobin's Q*. $X_{i,t}$ is the independent variable representing to *Busy_Bsize*, $Busy_{(log)}$, *Busy04*, and $Busy04_{(log)}$.

Table 4.2 Correlation Statistics Between Directors with Multiple Outside Directorships and Corporate Financial Decisions

	Busy_Bsize	Busy(log)	Busy04	Busy04(log)	CASH_TA	CAPEX_TA	SG&A	Tobin's Q	Bsize	Ind_Bsize	B_Meeting
Busy_Bsize	1										
Busy(log)	0.892***	1									
Busy04	0.599***	0.669***	1								
Busy04(log)	0.722***	0.755***	0.952***	1							
CASH_TA	0.057*	0.051*	0.0645**	0.066**	1						
CAPEX_TA	-0.0722**	-0.0555*	-0.0571*	-0.0548*	-0.006	1					
SG&A	0.023	0.012	0.0596*	0.022	-0.025	0.0514*	1				
Tobin's Q	-0.0869***	-0.107***	-0.019	-0.027	0.154***	0.112***	0.0562*	1			
Bsize	0.224***	0.380***	0.201***	0.288***	-0.026	0.008	-0.043	-0.037	1		
Ind_Bsize	-0.015	-0.065*	-0.066*	-0.167***	0.058*	-0.086***	0.033	-0.204***	-0.099***	1	
B_Meeting	0.054*	0.062*	0.004	-0.007	0.004	-0.025	-0.016	-0.055*	-0.030	0.139***	1
CEO_OWN	0.010	0.004	0.032	0.064*	-0.045	0.058*	-0.005	0.117***	-0.039	-0.173***	-0.156***
FAM_OWN	0.017	-0.003	-0.015	0.016	-0.160***	0.060*	0.001	0.064*	-0.114***	-0.176***	-0.069**
Assets (log)	0.353***	0.437***	0.360***	0.434***	0.042	0.094***	-0.073**	0.048	0.401***	-0.329***	0.073**
Leverage	-0.046	-0.006	-0.021	0.013	-0.355***	0.023	0.062*	-0.271***	0.067**	-0.022	-0.059*
NPPE	-0.145***	-0.100***	-0.109***	-0.093***	-0.210***	0.306***	0.060*	-0.056*	0.079**	0.018	-0.067**
CFO	0.025	0.028	0.023	0.004	0.250***	0.192***	-0.089***	0.347***	0.055*	-0.027	0.021
Sales_Growth	-0.009	0.001	-0.038	-0.038	0.016	0.053*	0.418***	0.036	0.032	-0.001	0.005
EBITDA	0.009	0.015	-0.009	-0.031	0.220***	0.181***	-0.117***	0.412***	0.033	-0.012	-0.025
NWC	-0.021	-0.037	-0.048	-0.052*	0.252***	-0.144***	-0.067**	0.144***	-0.155***	0.034	0.014
DIV	0.059*	0.059*	0.018	0.024	0.282***	0.004	-0.063*	0.503***	0.084**	-0.075**	0.026

Table 4.2 (continued)

	CEO_OWN	FAM_OWN	Assets (log)	Leverage	NPPE	CFO	Sales_Growth	EBITDA	NWC	DIV
CEO_OWN	1									
FAM_OWN	0.314***	1								
Assets (log)	0.007	-0.047	1							
Leverage	-0.012	-0.031	0.124***	1						
NPPE	0.046	-0.062*	-0.097***	0.277***	1					
CFO	0.089***	-0.031	0.102***	-0.298***	0.193***	1				
Sales_Growth	0.043	0.020	0.058*	0.015	0.013	0.003	1			
EBITDA	0.064*	-0.043	0.104***	-0.257***	0.158***	0.774***	0.038	1		
NWC	-0.124***	0.033	-0.068**	-0.340***	-0.334***	0.021	-0.052*	0.168***	1	
DIV	0.051*	-0.024	0.080**	-0.315***	0.012	0.568***	-0.007	0.642***	0.142***	1

Note: This table presents the Pearson's correlation matrix of explanatory, dependent and control variables. Financial decisions, multiple outside directorships of board directors and control variables are defined in Appendix 4.1. All continuous variables are winsorized at the 1st and 99th percentiles. * denotes significance at the 10% level, ** significance at the 5% level, and *** significance at the 1% level.

4.5 Empirical results

4.5.1 Descriptive statistics

Table 4.3 presents the descriptive statistics for the dependent variables, independent variables, and control variables used in my empirical analysis. In half of my sample, a regular board consists of approximately 7 directors with 33% holding multiple outside directorships (*Busy_Bsize*), the number of outside directorships held by board directors[28] is approximately 6. The prevalence of directors' busyness with holdings of four or more outside directorships (*Busy04)* in my sample is approximately 22%. The average number of board meetings is about seven per year. The rest of the control variables are consistent with the findings of previous studies (e.g., Agha & Eulaiwi, 2020; Eulaiwi et al., 2016; Fich & Shivdasani, 2006).

Table 4.3 Descriptive Statistics for The Variables Used in The Regression Analysis

	Obs	Mean	Median	SD	25th percentile	75th percentile
Dependent Variables						
CASH_TA	1653	0.098	0.061	0.102	0.028	0.138
CAPEX_TA	1653	0.056	0.035	0.061	0.014	0.075
SG&A	1653	0.161	0.112	0.316	0.057	0.192
Tobin's Q	1653	1.407	1.239	0.878	0.983	1.716
Explanatory Variables						
Busy_Bsize	1653	0.330	0.286	0.276	0.111	0.500
$Busy_{(log)}$	1653	1.736	1.946	1.076	1.099	2.639
Busy04	1653	0.218	0.000	0.297	0.000	0.471
$Busy04_{(log)}$	1653	0.848	0.000	1.117	0.000	1.609
Control Variables						
Bsize	1653	7.892	7.000	1.718	7.000	9.000
Ind_Bsize	1653	0.664	0.667	0.263	0.429	0.900
B_Meeting	1653	6.690	6.000	2.101	5.000	8.000
CEO_OWN	1653	0.020	0.000	0.070	0.000	0.009
FAM_OWN	1653	0.085	0.000	0.145	0.000	0.133
$Assets_{(log)}$	1653	4.379	4.396	1.914	3.059	5.586
Leverage	1653	0.200	0.164	0.187	0.033	0.316
NPPE	1653	0.403	0.392	0.220	0.234	0.566
CFO	1653	0.081	0.072	0.089	0.024	0.130
Sales_Growth	1653	0.195	0.059	1.256	-0.062	0.182
EBITDA	1653	0.098	0.089	0.078	0.045	0.141
NWC	1653	0.055	0.035	0.153	-0.034	0.143
DIV	1653	0.034	0.020	0.046	0.000	0.047

Note: This table presents descriptive statistics of financial decisions, multiple outside directorships of board directors, and control variables. Statistics cover the mean, median, standard deviation, 25th percentile and 75th percentile per variable. Financial decisions, multiple outside directorships of board directors and control variables are defined in Appendix 4.1. All continuous variables are winsorized at the 1st and 99th percentiles.

[28] The median figure of $Busy_{(log)}$ of a firm in the year *t* is 1.73.

4.5.2 Correlation matrix analysis

Table 4.3 shows the correlation matrix between the dependent and independent variables in this analysis.[29] The correlation coefficients between all proxies of outside directorships and cash holdings are significant and positive. Capital expenditure is negatively correlated with all measures of multiple directorships. The correlation between SG&A expenses and some of the proxies of multiple directorships are positively insignificant, while firm performance is negatively significant in some of these proxies.

4.5.3 Regression results

4.5.3.1 Cash holdings and directors' busyness (H1a)

I start the analysis by regressing firm cash holdings on board of directors' busyness using fixed-effects regression (Table 4.4). The coefficients of the four proxy measures of directors with multiple directorships or directors' busyness across all the models (1) to (4) are positive and statistically significant. The estimated coefficients of *Busy_Bsize*, *Busy$_{(log)}$*, *Busy04, and Busy04$_{(log)}$* are 0.033, 0.007, 0.027 and 0.007, respectively, at $p <$ 0.01. My findings are consistent with prior studies that found the existence of board directors who hold multiple directorships is detrimental to the governance role of the board, the fulfilment of the busy directors' duties (Fich & Shivdasani, 2006) and the effectiveness of board monitoring (Falato et al., 2014). In addition, I find boards with busy directors are more tolerant of the management team despite the team's poor management of the firm's resources, including cash (Core et al., 1999; Fich & Shivdasani, 2006). In terms of economic significance, shown in model (1) of Table 4.4, an increase of one standard deviation in directors with multiple directorships increases cash holdings by an average of 9%.[30] Regarding the control variables, I find that *Ind_Bsize*, *Assets$_{(log)}$*, and *CFO* are statistically significant and positive with cash holdings in all models. In contrast, corporate cash holdings decrease with higher *leverage, NPPE,* and *EBITDA.* These findings are generally consistent with prior research on cash holdings (e.g., Boubaker et al., 2015).

[29] I analyse inflation factors of variance in my sample to examine the issue of multicollinearity.

[30] In the first regression model (1), the economic significance of cash holdings = 0.276 (standard deviation of *Busy_Bsize*) * 0.033 (estimated coefficient on *Busy_Bsize*) /0.102 (standard deviation of *CASH_TA*) = 0.089

Table 4.4 Regression Results of Multiple Directorships on Cash Holdings

Variables	Model (1)	Model (2)	Model (3)	Model (4)
Constant	-0.162***	-0.148***	-0.150***	-0.148***
	(-3.95)	(-3.63)	(-3.70)	(-3.65)
Busy_Bsize	0.033***			
	(3.33)			
$Busy_{(log)}$		0.007***		
		(2.69)		
Busy04			0.027***	
			(3.34)	
$Busy04_{(log)}$				0.007***
				(3.14)
Bsize	0.008	0.002	0.006	0.005
	(0.50)	(0.11)	(0.37)	(0.29)
Ind_Bsize	0.024**	0.025**	0.028***	0.027***
	(2.34)	(2.43)	(2.68)	(2.65)
B_Meeting	0.005	0.005	0.004	0.005
	(0.80)	(0.76)	(0.60)	(0.67)
CEO_OWN	0.001	0.001	0.002	0.003
	(0.01)	(0.02)	(0.06)	(0.09)
FAM_OWN	-0.011	-0.010	-0.005	-0.004
	(-0.44)	(-0.41)	(-0.19)	(-0.18)
$Assets_{(log)}$	0.081***	0.081***	0.081***	0.081***
	(18.60)	(18.49)	(18.53)	(18.47)
Leverage	-0.100***	-0.099***	-0.101***	-0.101***
	(-6.25)	(-6.20)	(-6.33)	(-6.31)
NPPE	-0.176***	-0.176***	-0.176***	-0.176***
	(-10.45)	(-10.38)	(-10.44)	(-10.42)
CFO	0.224***	0.224***	0.221***	0.223***
	(8.78)	(8.74)	(8.63)	(8.70)
Sales_Growth	0.001	0.001	0.001	0.001
	(0.67)	(0.71)	(0.66)	(0.68)
EBITDA	-0.175***	-0.175***	-0.178***	-0.179***
	(-4.27)	(-4.23)	(-4.31)	(-4.34)
NWC	-0.007	-0.007	-0.009	-0.008
	(-0.38)	(-0.38)	(-0.50)	(-0.41)
DIV	0.075	0.080	0.082	0.083
	(1.42)	(1.52)	(1.56)	(1.57)
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1658	1650	1650	1650
R-squared	0.4155	0.4131	0.4147	0.4142

Note: This table presents the relationship between directors with multiple outside directorships and corporate cash holdings. Cash holdings, multiple outside directorships of board directors and control variables are defined in Appendix 4.1. All continuous variables are winsorized at the 1st and 99th percentiles. The *t*-statistic is reported in parentheses below each coefficient. * denotes significance at the 10% level, ** significance at the 5% level, and *** significance at the 1% level.

4.5.3.2 Capital expenditure and directors' busyness (H1b)

Since increased corporate cash holdings may be used to finance new investment opportunities, the findings in Table 4.4 motivated me to expand my analysis to estimate the effect of board busyness on capital expenditure (Table 4.5). It is found that all measures of busy board directors (*Busy_Bsize, Busy$_{(log)}$, Busy04* and *Busy04$_{(log)}$*) are significant and negative with estimated coefficients of –0.024, –0.004, –0.015 and –0.005, respectively. In terms of economic significance, for example, in model (3), an increase of one standard deviation in directors' busyness decreases capital expenditure by an average of 7.30%.[31] These results are consistent with the view that directors' busyness has a negative impact on the firm's investment decisions, resulting in inefficient evaluation of investment opportunities (Chen & Chen, 2012; Giroud & Mueller, 2010). From the results shown in Table 4.4 and Table 4.5, I find that firms with busy directors on their boards have both higher levels of cash holdings and lower levels of capital expenditure. I also control for the same variables as in my first regression and find that *FAM_OWN*, *NPPE*, and *CFO* have positive and significant relationships with *CAPEX_TA*, while firm size (*Assets$_{(log)}$*), *Leverage and EBITDA* have negative relationships.

Table 4.5 Regression Results of Multiple Directorships on Capital Expenditure

Variables	Model (1)	Model (2)	Model (3)	Model (4)
Constant	0.053	0.042	0.043	0.044
	(1.40)	(1.11)	(1.14)	(1.17)
Busy_Bsize	-0.024***			
	(-2.70)			
Busy$_{(log)}$		-0.004*		
		(-1.71)		
Busy04_Bsize			-0.015**	
			(-2.02)	
Busy04$_{(log)}$				-0.005**
				(-2.49)
Bsize	0.004	0.009	0.007	0.007
	(0.29)	(0.61)	(0.45)	(0.47)
Ind_Bsize	-0.003	-0.004	-0.005	-0.006
	(-0.35)	(-0.43)	(-0.58)	(-0.61)
B_Meeting	-0.004	-0.003	-0.003	-0.003
	(-0.58)	(-0.53)	(-0.43)	(-0.48)

[31] The economic significance of cash holdings is calculated as 0.297 (standard deviation of *Busy04_Bsize*) *(-0.015 (estimated coefficient on *Busy04_Bsize*) /0.061 (standard deviation of *CAPEX_TA*) = -0.073.

Variables	Model (1)	Model (2)	Model (3)	Model (4)
CEO_OWN	0.052	0.052	0.051	0.05
	(1.54)	(1.54)	(1.52)	(1.48)
FAM_OWN	0.046**	0.045**	0.042*	0.042*
	(2.09)	(2.02)	(1.89)	(1.88)
Assets $_{(log)}$	-0.007*	-0.007*	-0.007*	-0.007*
	(-1.68)	(-1.67)	(-1.68)	(-1.65)
Leverage	-0.031**	-0.032**	-0.031**	-0.031**
	(-2.15)	(-2.19)	(-2.11)	(-2.09)
NPPE	0.121***	0.120***	0.121***	0.121***
	(7.78)	(7.73)	(7.76)	(7.76)
CFO	0.056**	0.056**	0.058**	0.057**
	(2.38)	(2.37)	(2.44)	(2.41)
Sales_Growth	0.001	0.001	0.001	0.001
	(0.56)	(0.54)	(0.57)	(0.55)
EBITDA	-0.199***	-0.200***	-0.198***	-0.197***
	(-5.27)	(-5.27)	(-5.23)	(-5.19)
NWC	0.024	0.023	0.025	0.024
	(1.35)	(1.34)	(1.41)	(1.38)
DIV	0.073	0.069	0.068	0.067
	(1.50)	(1.42)	(1.39)	(1.39)
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1658	1650	1650	1650
R-squared	0.1421	0.1393	0.1400	0.1413

Note: This table presents the relation between directors with multiple outside directorships and capital expenditure. Capital expenditure, multiple outside directorships of board directors and control variables are defined in Appendix 4.1. All continuous variables are winsorized at the 1st and 99th percentiles. The *t*-statistic is reported in parentheses below each coefficient. * denotes significance at the 10% level, ** significance at the 5% level, and *** significance at the 1% level.

4.5.3.3 SG&A expenses and directors' busyness (H1c)

I also check the possibility of the ineffectiveness of extra funds in non-productive areas such as salaries and other expenditures, which are easily hidden under a large account such as SG&A expenses. Table 4.6 shows that all proxy measures of directors' busyness (*Busy_Bsize*, *Busy$_{(log)}$*, *Busy04 and Busy04$_{(log)}$*) are significantly positive with coefficients of 0.128, 0.053, 0.026 and 0.037, respectively. This finding suggests that an increase in directors' busyness magnifies SG&A expenses by an average of 12%, as reported in model (1)[32], likely because such directors are ineffective or distracted in

[32] 0.297 ((standard deviation of *Busy04_Bsize*) * 0.128 (estimated coefficient of *Busy_Bsize*) /0.316 (standard deviation of *SG&A*) = 0.1203.

monitoring the board's and management's decisions. Using the same control variables as in my first empirical analysis, I find that *Sales_Growth* and *EBITDA* are significantly negative; however, some of the control variables are still significantly negative through the models (1) to (4).

Table 4.6 Regression Results of Multiple Directorships on SG&A Expenses

Variables	Model (1)	Model (2)	Model (3)	Model (4)
Constant	0.558***	0.564***	0.341***	0.592***
	(2.63)	(2.69)	(4.87)	(2.82)
Busy_Bsize	0.128**			
	(2.53)			
$Busy_{(log)}$		0.053***		
		(4.13)		
Busy04			0.026*	
			(1.89)	
$Busy04_{(log)}$				0.037***
				(3.02)
Bsize	-0.123	-0.152*	0.024	-0.135
	(-1.44)	(-1.80)	(0.85)	(-1.59)
Ind_Bsize	-0.022	-0.016	-0.002	-0.006
	(-0.41)	(-0.31)	(-0.10)	(-0.11)
B_Meeting	0.003	0.003	-0.012	-0.001
	(0.08)	(0.08)	(-0.99)	(-0.03)
CEO_OWN	0.236	0.247	0.173***	0.253
	(1.25)	(1.31)	(2.74)	(1.33)
FAM_OWN	0.068	0.052	0.047	0.093
	(0.55)	(0.42)	(1.15)	(0.75)
$Assets_{(log)}$	-0.012	-0.01	-0.039***	-0.012
	(-0.52)	(-0.45)	(-5.16)	(-0.53)
Leverage	-0.125	-0.125	-0.052*	-0.133
	(-1.52)	(-1.52)	(-1.89)	(-1.61)
NPPE	-0.113	-0.112	-0.069**	-0.113
	(-1.29)	(-1.29)	(-2.36)	(-1.30)
CFO	-0.077	-0.075	0.001	-0.083
	(-0.58)	(-0.57)	(0.01)	(-0.63)
Sales_Growth	-0.014**	-0.013**	-0.002	-0.013**
	(-2.48)	(-2.41)	(-1.04)	(-2.46)
EBITDA	-0.729***	-0.727***	-0.613***	-0.749***
	(-3.43)	(-3.43)	(-8.63)	(-3.52)
NWC	-0.054	-0.062	0.026	-0.059
	(-0.55)	(-0.64)	(0.78)	(-0.60)

Variables	Model (1)	Model (2)	Model (3)	Model (4)
DIV	0.303	0.309	0.157*	0.335
	(1.11)	(1.14)	(1.73)	(1.23)
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1658	1650	1650	1650
R-squared	0.1043	0.0962	0.1001	0.1022

Note: This table presents the relation between directors with multiple outside directorships and SG&A expenses. SG&A expenses, multiple outside directorships of board directors and control variables are defined in Appendix 4.1. All continuous variables are winsorized at the 1st and 99th percentiles. The *t*-statistic is reported in parentheses below each coefficient. * denotes significance at the 10% level, ** significance at the 5% level, and *** significance at the 1% level.

4.5.3.4 Firm performance and directors' busyness (H1d)

In this section, I present the results from the empirical analysis relating to the effects of board directors' busyness on firm value. As shown in all models (1 to 4) in Table 4.7, the effect of directors' busyness using multiple proxies such as *Busy_Bsize*, $Busy_{(log)}$, *Busy04* and $Busy04_{(log)}$ is statistically negative, with estimated coefficients of –0.401, –0.102, –0.274 and –0.098, respectively. These findings suggest that an increase in board busyness is significantly associated with an un-improvement (decrease) in firm value. This result could be an outcome of my previous findings that directors' busyness increases cash holdings, decreases capital expenditure, increases SG&A expenses, and affect firm performance when they reach a certain level.

Table 4.7 Regression results of multiple directorships on firm value (Tobin's Q)

Variables	Model (1)	Model (2)	Model (3)	Model (4)
Constant	1.447***	1.333***	1.302***	1.317***
	(3.66)	(3.40)	(3.32)	(3.36)
Busy_Bsize	-0.401***			
	(-4.27)			
$Busy_{(log)}$		-0.102***		
		(-4.27)		
Busy04			-0.274***	
			(-3.59)	
$Busy04_{(log)}$				-0.098***
				(-4.37)
Bsize	-0.084	-0.003	-0.048	-0.041
	(-0.52)	(-0.02)	(-0.30)	(-0.26)
Ind_Bsize	-0.012	-0.025	-0.051	-0.056
	(-0.12)	(-0.25)	(-0.52)	(-0.56)

B_Meeting	-0.058	-0.055	-0.042	-0.046
	(-0.88)	(-0.84)	(-0.64)	(-0.71)
CEO_OWN	-0.563	-0.574	-0.581	-0.605*
	(-1.60)	(-1.63)	(-1.64)	(-1.72)
FAM_OWN	0.151	0.158	0.082	0.075
	(0.66)	(0.68)	(0.35)	(0.33)
Assets $_{(log)}$	0.042	0.040	0.041	0.043
	(1.00)	(0.96)	(0.97)	(1.03)
Leverage	-0.579***	-0.587***	-0.568***	-0.563***
	(-3.79)	(-3.83)	(-3.70)	(-3.67)
NPPE	0.131	0.128	0.132	0.132
	(0.81)	(0.79)	(0.81)	(0.81)
CFO	-0.217	-0.220	-0.186	-0.201
	(-0.89)	(-0.90)	(-0.76)	(-0.82)
Sales_Growth	0.004	0.004	0.005	0.004
	(1.52)	(1.38)	(1.53)	(1.50)
EBITDA	1.935***	1.930***	1.965***	1.988***
	(4.93)	(4.90)	(4.98)	(5.05)
NWC	0.060	0.065	0.079	0.069
	(0.33)	(0.36)	(0.43)	(0.38)
DIV	2.137***	2.088***	2.045***	2.038***
	(4.22)	(4.12)	(4.03)	(4.02)
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1658	1650	1650	1650
R-squared	0.1470	0.1472	0.1441	0.1477

Note: This table presents the relation between directors with multiple outside directorships and firm performance (Tobin's Q). Tobin's Q, multiple outside directorships of board directors and control variables are defined in Appendix 4.1. All continuous variables are winsorized at the 1st and 99th percentiles. The *t*-statistic is reported in parentheses below each coefficient. * denotes significance at the 10% level, ** significance at the 5% level, and *** significance at the 1% level.

4.5.3.5 Life cycle stages and directors' busyness H2a-d

I also investigate how directors' busyness increases both cash holdings and SG&A expenses and reduces capital expenditure and firm performance through the stages of the firm life cycle. Consistent with previous studies (Dickinson, 2011; Lu & Sapra, 2009), I divide my sample into five subsamples that reflect the five stages of the life cycle (i.e., introduction, growth, maturity, shakeout, and decline stages) and run separate regressions for each life cycle stage. This approach increases the statistical power of the analyses (Lu & Sapra, 2009). The proxy measures of life cycle stages used by Dickinson (2011) classifies all firms sampled into the five life cycle stages based on cash flows: INTRODUCTION (if firms have negative operating cash flows and investing activity cash flows, but positive

financing activity cash flows); GROWTH (if cash flows from operating and financing activities are positive, but investing activity cash flows are negative); MATURITY (if operating cash flows are positive, but cash flows from investing and financing activity are negative); DECLINE (if firms have negative operating cash flows, positive investing activity cash flows, and financing activity cash flows are either zero, positive or negative); and SHAKEOUT (the rest of the firm years classify into the shakeout stage).

I present my results regarding the association between board directors' busyness, firm life cycle stages, and financial decisions in Table 4.8. I include the four proxies of directors' busyness (*Busy_Bsize, Busy$_{(log)}$, Busy04 and Busy04$_{(log)}$*) in each regression of the financial decisions (*CASH_TA*, *CAPEX_TA*, *SG&A*, and *Tobin's Q*). In Panel A, my results suggest that *Busy_Bsize*, *Busy04* and *Busy04$_{(log)}$* are economically significant and positively associated with *CASH_TA* during the introduction, maturity and shakeout stages of life cycle. For example, the coefficients of *Busy_Bsize* are 0.131, 0.025 and 0.103 during the introduction, maturity and shakeout stages, respectively, and are statistically significant at 5% level or better.

The results of analyzing *CAPEX_TA* as dependent variable are in Panel B. It reports that the coefficients of directors' busyness (Busy04$_{(log)}$) are negatively significant during the maturity and shakeout stages, but positively significant during the decline stage at p <0.05 or better. My regression results support the theoretical argument that since CEOs in firms with busy directors increase cash holdings in maturity and shakeout stages, they would potentially miss investment opportunities and decrease capital expenditure in these stages. However, managers of decline firms tend to re-invest in order to keep firm survive.

Panel C reports my findings for SG&A expenses that directors' busyness is significantly positive in the introduction and growth stages. These findings show that managers would take advantage of the opportunity to manipulate SG&A expenses in the earlier stages of corporate life cycles. Panel D shows that the coefficients of directors' busyness are significantly negative for Tobin's Q across the introduction, growth and maturity stages of the life cycle. My findings are consistent with my hypotheses ($H_{2a\text{-}d}$), suggesting that boards with too many seats occupied by busy directors are less effective in their monitoring functions within a firm, which may allow mangers to hide important information and make financial decisions based on their personal interests.

Table 4.8 Regression Results of Multiple Directorships on Financial Decisions Across Life Cycle Stages

Panel A: Cash Holdings as Dependent

Variables \ Stages	INTRO	GROWTH	MATURITY	SHAKEOUT	DECLINE
Busy_Bsize	0.131*	-0.024	0.025**	0.103**	-0.11
	(1.68)	(-0.85)	(2.07)	(2.21)	(-1.12)
$Busy_{(log)}$	0.039**	-0.005	0.004	0.021	-0.005
	(2.62)	(-0.71)	(1.30)	(1.63)	(-0.11)
Busy04	0.175***	0.011	0.017*	0.173***	-0.128
	(3.15)	(0.48)	(1.85)	(3.36)	(-0.67)
$Busy04_{(log)}$	0.047***	0.001	0.005*	0.041***	-0.055
	(2.75)	(0.03)	(1.67)	(2.89)	(-1.08)
Control Variables	Included	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes
Observations	135	323	930	192	78

Panel B: Capital Expenditure as Dependent

Variables \ Stages	INTRO	GROWTH	MATURITY	SHAKEOUT	DECLINE
Busy_Bsize	0.02	-0.053	-0.018*	-0.074**	0.069*
	(0.39)	(-1.36)	(-1.90)	(-2.49)	(2.02)
$Busy_{(log)}$	0.005	0.003	-0.003	-0.014	0.021
	(0.52)	(0.33)	(-1.32)	(-1.65)	(1.41)
Busy04	0.069*	-0.012	-0.014*	-0.086**	0.134*
	(1.81)	(-0.40)	(-1.91)	(-2.52)	(2.10)
$Busy04_{(log)}$	0.019	-0.005	-0.005**	-0.028***	0.038**
	(1.65)	(-0.57)	(-2.06)	(-3.07)	(2.30)
Control Variables	Included	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes
Observations	135	323	930	192	78

Panel C: SG&A Expenses as Dependent

Variables \ Stages	INTRO	GROWTH	MATURITY	SHAKEOUT	DECLINE
Busy_Bsize	0.275*	0.053**	-0.002	0.047	-0.025
	(1.68)	(2.06)	(-0.10)	(1.47)	(-0.05)
$Busy_{(log)}$	0.068**	0.011*	-0.001	0.011	0.187
	(2.07)	(1.80)	(-0.32)	(1.30)	(0.83)
Busy04	0.269**	0.018	0.013	-0.015	0.729
	(2.16)	(0.87)	(0.98)	(-0.40)	(0.75)
$Busy04_{(log)}$	0.073*	0.009	0.004	-0.001	0.103
	(1.97)	(1.53)	(1.02)	(-0.14)	(0.39)
Control Variables	Included	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes
Observations	135	323	930	192	78

Table 4.8 (continued)

Panel D: Tobin's Q as Dependent					
Variables \ Stages	**INTRO**	**GROWTH**	**MATURITY**	**SHAKEOUT**	**DECLINE**
Busy_Bsize	-0.936*	-0.709***	-0.256**	-0.188	-0.906
	(-1.81)	(-2.78)	(-2.05)	(-0.45)	(-0.91)
$Busy_{(log)}$	-0.273**	-0.175***	(0.04)	(0.02)	(0.29)
	(-2.41)	(-2.91)	(-1.10)	(-0.17)	(-0.79)
Busy04	-1.374***	-0.479**	-0.012	-0.305	-0.029
	(-3.37)	(-2.32)	(-0.12)	(-0.62)	(-0.02)
$Busy04_{(log)}$	-0.416***	-0.132**	-0.031	-0.121	-0.011
	(-3.43)	(-2.18)	(-1.02)	(-0.93)	(-0.01)
Control Variables	Included	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes
Observations	135	323	930	192	78

Note: This table presents the relationship between directors with multiple outside directorships and financial decisions across firm life cycle stages. Panel A presents the relationship between directors with multiple outside directorships and cash holdings. Panel B presents the relationship between directors with multiple outside directorships and capital expenditure. Panel C presents the relationship between directors with multiple outside directorships and SG&A expenses. Panel D presents the relationship between directors with multiple outside directorships and firm performance (Tobin's Q). Financial decisions, multiple outside directorships of board directors and control variables are defined in Appendix 4.1. All continuous variables are winsorized at the 1st and 99th percentiles. The *t*-statistic is reported in parentheses below each coefficient. * denotes significance at the 10% level, ** significance at the 5% level, and *** significance at the 1% level.

4.5.4 Additional analysis: robustness check

4.5.4.1 Alternative proxy measures of financial decisions

Results from my main regressions show a relationship exists between board directors' busyness and corporate financial decisions, including cash holdings, capital expenditure, SG&A expenses, and Tobin's Q. To support the results from my analysis, in this section, I use alternatives measures for each dependent variable. Table 4.9, Panel A provides the estimation results of an alternative proxy measure of corporate cash holdings. Following Bates, Kahle, & Stulz (2009), I measure corporate cash holdings by the ratio of cash and marketable securities over net assets; net assets is used because the future profitability of a firm depends on its total assets. The results obtained from this analysis are consistent with my findings in Table 4.4 that multiple directorships as used in models (1) to (4) magnify cash holdings.

I also use another measure of capital expenditure calculated as the ratio of capital expenditure divided by lagged total assets.[33] Table 4.9, Panel B reports the regression

[33] Agha and Eulaiwi (2020) measure capital expenditure as ratio of capital expenditure to lagged net property, plant and equipment. I used lagged total assets instead lagged net property, plant and equipment.

results of this alternative proxy measure for capital expenditure and board directors' busyness using the four proxies of busyness. I find a negative relationship between capital expenditure and *Busy_Bsize* at $p < 0.05$, as in model (1); in addition, I find a strong and negative relationship between capital expenditure and $Busy_{(log)}$ at $p < 0.01$, as shown in model (2).

I adopt additional a proxy measure of SG&A expenses using the ratio of SG&A expenses to total assets. The regression results are consistent with my finding in Table 4.6 that the SG&A expenses are magnified for boards with multiple directorships, as shown in Table 4.9, Panel C; all models remain statistically significant and positive at $p \leq 0.10$.

Finally, I also apply an alternative measure of Tobin's Q, calculated as the sum of the market value of equity and book value of liabilities, divided by lagged total assets. Panel D presents the regression results for the alternative measure of Tobin's Q, where the economic magnitude of the findings of models (1) to (4) is statistically significant and the association is negative.

Table 4.9 Regression Results of Multiple Directorships on Alternative Measures of Financial Decisions

Panel A: Cash Holdings as Dependent				
Variables	**Model (1)**	**Model (2)**	**Model (3)**	**Model (4)**
Constant	-0.207***	-0.191***	-0.200***	-0.195***
	(-3.53)	(-3.28)	(-3.44)	(-3.36)
Busy_Bsize	0.038***			
	(2.74)			
$Busy_{(log)}$		0.009**		
		(2.41)		
Busy04			0.045***	
			(4.00)	
$Busy04_{(log)}$				0.012***
				(3.49)
Control Variables	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1658	1650	1650	1650
R-squared	0.3877	0.3859	0.3902	0.3886

Table 4.9 (continued)

Panel B: Capital Expenditure as Dependent				
Variables	**Model (1)**	**Model (2)**	**Model (3)**	**Model (4)**
Constant	6.135***	6.078***	5.878***	5.869***
	(7.67)	(7.67)	(7.40)	(7.39)
Busy_Bsize	-0.376**			
	(-1.97)			
$Busy_{(log)}$		-0.130***		
		(-2.70)		
Busy04			-0.017	
			(-0.11)	
$Busy04_{(log)}$				-0.001
				(-0.01)
Control Variables	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1658	1650	1650	1650
R-squared	0.0682	0.0704	0.0657	0.0657

Panel C: SG&A Expenses as Dependent				
Variables	**Model (1)**	**Model (2)**	**Model (3)**	**Model (4)**
Constant	0.605***	0.604***	0.620***	0.620***
	(8.45)	(8.54)	(8.75)	(8.76)
Busy_Bsize	0.038**			
	(2.26)			
$Busy_{(log)}$		0.015***		
		(3.47)		
Busy04			0.025*	
			(1.82)	
$Busy04_{(log)}$				0.008**
				(1.98)
Control Variables	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1658	1650	1650	1650
R-squared	0.1382	0.1425	0.1373	0.1377

Table 4.9 (continued)

Panel D: Tobin's Q as Dependent				
Variables	**Model (1)**	**Model (2)**	**Model (3)**	**Model (4)**
Constant	5.472***	4.988***	4.700***	4.745***
	(3.67)	(3.36)	(3.16)	(3.19)
Busy_Bsize	-1.523***			
	(-4.41)			
$Busy_{(log)}$		-0.336***		
		(-3.88)		
Busy04			-0.543*	
			(-1.95)	
$Busy04_{(log)}$				-0.198**
				(-2.41)
Control Variables	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1658	1650	1650	1650
R-squared	0.3469	0.3459	0.3407	0.3416

Note: This table presents the relationship between directors with multiple outside directorships and additional measures of financial decisions. Panel A presents the relationship between directors with multiple outside directorships and an additional measure of cash holdings. Panel B presents the relationship between directors with multiple outside directorships and an additional measure of capital expenditure. Panel C presents the relationship between directors with multiple outside directorships and an additional measure of SG&A expenses. Panel D presents the relationship between directors with multiple outside directorships and an additional measure of firm performance (Tobin's Q). Financial decisions, multiple outside directorships of board directors and control variables are defined in Appendix 4.1. All continuous variables are winsorized at the 1st and 99th percentiles. The *t*-statistic is reported in parentheses below each coefficient. * denotes significance at the 10% level, ** significance at the 5% level, and *** significance at the 1% level.

4.5.4.2 Alternative proxy measures of directors' busyness

To check the robustness of my empirical findings presented in Table 4.4 – Table 4.7, I test the association between directors' busyness and financial decisions with different proxy measures of director busyness: *Busy03_Bsize, Busy03_D, Busy04_D,* and *Busy04>50%* (Ferris et al., 2003; Fich & Shivdasani, 2006; Jiraporn et al., 2008).

Busy03_Bsize is calculated as the total number of busy directors who hold three or more outside board seats divided by the total number of board members. *Busy03_D* is a dichotomous variable that takes the value of 1 if the board has at least one director with three or more outside board seats, and 0 otherwise. To classify directors' busyness, I use *Busy04_D* as the cut-off point, which is gauged as a dichotomous variable that takes the value of 1 if the board has at least one director with four or more outside board seats, and 0 otherwise. Finally, I construct *Busy04>50%*, which is computed as a dichotomous

variable that takes the value of 1 if more than 50% of the board members hold four or more outside board seats, and 0 otherwise. The results are reported in Table 4.10.

Table 4.10, Panel A presents the relationship between additional measures of directors with multiple outside directorships and cash holdings. Models (1) to (4) show the coefficients of *Busy03_Bsize, Busy03_D, Busy04_D,* and *Busy04>50%* and cash holdings are positive and significant at $p<0.10$ or better. Panel B shows the relationship between additional measures of directors with multiple outside directorships and capital expenditure. In models (1) to (4), the coefficients of all alternative proxy measures of busy directors and capital expenditure are negatively significant. Panel C presents the relationship between additional measures of directors with multiple outside directorships and SG&A expenses. In models (2) to (4) the coefficients of *Busy03_D, Busy04_D,* and *Busy04>50%* and SG&A expenses are significantly positive at $p < 0.01$. Panel D presents the relationship between additional measures of directors with multiple outside directorships and firm performance (Tobin's Q). The coefficients of all additional measures of busy directors and Tobin's Q in all models are significant and negative.

The overall results of Table 4.10 suggest that the additional measures of directors' busyness are associated with higher cash holdings, lower capital expenditure, higher SG&A expenses, and lower firm performance.

Table 4.10 Regression Results of Additional Measures of Multiple Directorships on Financial Decisions

Panel A: Cash Holdings as Dependent				
Variables	Model (1)	Model (2)	Model (3)	Model (4)
Constant	-0.160***	-0.142***	-0.137***	-0.140***
	(-3.84)	(-3.54)	(-3.44)	(-3.49)
Busy03_Bsize	0.029**			
	(2.44)			
Busy03_D		0.011**		
		(2.37)		
Busy04_D			0.011**	
			(2.21)	
Busy04>50%				0.008*
				(1.77)
Control Variables	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1658	1650	1650	1650
R-squared	0.4126	0.4007	0.4004	0.3997

Table 4.10 (continued)

Panel B: Capital Expenditure as Dependent				
Variables	Model (1)	Model (2)	Model (3)	Model (4)
Constant	0.05	0.055	0.053	0.059
	(1.31)	(1.48)	(1.44)	(1.58)
Busy03_Bsize	-0.018*			
	(-1.70)			
Busy03_D		-0.008**		
		(-2.00)		
Busy04_D			-0.012***	
			(-2.67)	
Busy04>50%				-0.011***
				(-2.60)
Control Variables	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1658	1650	1650	1650
R-squared	0.1393	0.1459	0.1477	0.1475
Panel C: SG&A Expenses as Dependent				
Variables	Model (1)	Model (2)	Model (3)	Model (4)
Constant	0.845***	0.877***	0.913***	0.884***
	(3.75)	(3.96)	(4.15)	(3.99)
Busy03_Bsize	0.081			
	(1.36)			
Busy03_D		0.076***		
		(3.26)		
Busy04_D			0.080***	
			(3.21)	
Busy04>50%				0.068***
				(2.75)
Control Variables	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1658	1650	1650	1650
R-squared	0.0994	0.1079	0.1047	0.1031

Table 4.10 (continued)

Panel D: Tobin's Q as Dependent				
Variables	Model (1)	Model (2)	Model (3)	Model (4)
Constant	1.578***	1.353***	1.279***	1.311***
	(3.96)	(3.52)	(3.34)	(3.39)
Busy03_Bsize	-0.499***			
	(-4.46)			
Busy03_D		-0.171***		
		(-3.99)		
Busy04_D			-0.176***	
			(-3.85)	
Busy04>50%				-0.123***
				(-2.72)
Control Variables	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1658	1650	1650	1650
R-squared	0.1491	0.1465	0.1459	0.1417

Note: This table presents the relationship between additional measures of multiple directorships and financial decisions. Panel A presents the relationship between additional measures of directors with multiple outside directorships and cash holdings. Panel B presents the relationship between additional measures of directors with multiple outside directorships and capital expenditure. Panel C presents the relationship between additional measures of directors with multiple outside directorships and SG&A expenses. Panel D presents the relationship between additional measures of directors with multiple outside directorships and firm performance (Tobin's Q). Financial decisions, multiple outside directorships of board directors and control variables are defined in Appendix 4.1. All continuous variables are winsorized at the 1st and 99th percentiles. The *t*-statistic is reported in parentheses below each coefficient. * denotes significance at the 10% level, ** significance at the 5% level, and *** significance at the 1% level.

4.5.4.3 Endogeneity test: two-step system generalized method of moments (GMM)

My empirical analysis so far suggests that directors' busyness in firms is associated with corporate financial decisions. However, the statistical significance, magnitude, and direction of these regressions may be biased if the board busyness is correlated with the error term (ε). Thus, I adopt the two-step system (GMM) method developed by Arellano and Bover (1995) and Blundell and Bond (1998) to test the robustness of my findings in terms of endogeneity. The GMM estimation ensures that my results do not flow from the dependent variables to the explanatory variables. This approach should also mitigate any problems with omitted variable bias and unknown heterogeneity.[34] The GMM estimation tests the underlying levels equations, by which each variable is instrumented with its own initial difference. In addition to the GMM estimation, it is important to apply valid

[34] I applied the 'xtabond2' module in Stata to obtain the two-step system GMM estimate (Roodman, 2009).

instruments for the endogenous variables, and to use no second-order or higher-order autocorrelations in the error term.

For the GMM estimation, the lagged instruments and explanatory variables are treated as endogenous variables. In this case, the lagged dependent variables (i.e. corporate financial decisions) and multiple board directorships are potential endogenous variables. In my analysis, the *p*-values of AR_1 and AR_2 are determined from measuring the significance of the first-order autocorrelations, but not the significance of the second-order autocorrelations. Moreover, the 'Hansen test' of overidentifying restrictions is used to check the validity of the instruments, under the null hypothesis that these instruments used are valid and exogenous in the GMM estimation. Table 4.11 reports the results for serial autocorrelations tests and the Hansen test of overidentifying restrictions. My sample size is reduced after using the lag on my key variables. Panels A, B, C, and D present the results of the GMM estimation for models (1) to (4); I obtain significant results, which strengthen my findings in Table 4.4 – Table 4.7.

Table 4.11 Two-Step System Generalised Method of Moments (GMM) Regression Results of Multiple Directorships on Financial Decisions

Panel A: Cash Holdings as Dependent				
Variables	**Model (1)**	**Model (2)**	**Model (3)**	**Model (4)**
Constant	0.067***	0.049***	0.053***	0.063***
	(3.39)	(2.58)	(2.72)	(3.44)
L.cash	0.569***	0.589***	0.573***	0.587***
	(31.13)	(30.37)	(33.05)	(32.15)
Busy_Bsize	0.035***			
	(3.98)			
$Busy_{(log)}$		0.013***		
		(4.38)		
Busy04			0.015***	
			(2.76)	
$Busy04_{(log)}$				0.005***
				(2.69)
Control Variables	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1539	1531	1531	1531
m1-test p-value	0.000	0.000	0.000	0.000
m2-test p-value	0.184	0.151	0.128	0.136
Hansen test p-value	0.245	0.190	0.427	0.377

Table 4.11 (continued)

Panel B: Capital Expenditure as Dependent				
Variables	**Model (1)**	**Model (2)**	**Model (3)**	**Model (4)**
Constant	0.013	0.005	0.007	0.009
	(0.86)	(0.32)	(0.48)	(0.72)
L.capex	0.332***	0.347***	0.347***	0.352***
	(16.42)	(16.21)	(17.34)	(15.22)
Busy_Bsize	-0.025***			
	(-3.54)			
$Busy_{(log)}$		-0.010***		
		(-4.32)		
Busy04			-0.030***	
			(-4.52)	
$Busy04_{(log)}$				-0.010***
				(-5.05)
Control Variables	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1539	1531	1531	1531
m1-test p-value	0.000	0.000	0.000	0.000
m2-test p-value	0.435	0.482	0.550	0.537
Hansen test p-value	0.067	0.179	0.212	0.227
Panel C: SG&A Expenses as Dependent				
Variables	**Model (1)**	**Model (2)**	**Model (3)**	**Model (4)**
Constant	0.182***	0.197***	0.150***	0.166***
	(4.22)	(4.90)	(4.25)	(4.96)
L.SG&A	0.309***	0.357***	0.058***	0.047***
	(17.79)	(19.55)	(17.29)	(16.34)
Busy_Bsize	0.078***			
	(4.07)			
$Busy_{(log)}$		0.018***		
		(4.20)		
Busy04			0.113***	
			(15.24)	
$Busy04_{(log)}$				0.027***
				(10.26)
Control Variables	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1539	1531	1531	1531
m1-test p-value	0.030	0.026	0.053	0.054
m2-test p-value	0.868	0.950	0.341	0.308
Hansen test p-value	0.692	0.695	0.307	0.200

Table 4.11 (continued)

Panel D: Tobin's Q as Dependent				
Variables	**Model (1)**	**Model (2)**	**Model (3)**	**Model (4)**
Constant	0.663***	0.209	0.311*	0.591***
	(4.05)	(1.27)	(1.78)	(3.68)
L.TQ	0.514***	0.519***	0.534***	0.535***
	(24.54)	(26.12)	(27.08)	(24.50)
Busy_Bsize	-0.321***			
	(-5.09)			
$Busy_{(log)}$		-0.049***		
		(-2.61)		
Busy04			-0.282***	
			(-4.53)	
$Busy04_{(log)}$				-0.046***
				(-3.06)
Control Variables	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1539	1531	1531	1531
m1-test p-value	0.000	0.000	0.000	0.000
m2-test p-value	0.206	0.225	0.204	0.228
Hansen test p-value	0.212	0.122	0.091	0.065

Note: This table presents the relation between multiple-directorships on financial decisions using the two-step system generalised method of moments (GMM) regression. Panel A presents the relationship between directors with multiple outside directorships and cash holdings using GMM. Panel B presents the relationship between directors with multiple outside directorships and capital expenditure using GMM. Panel C presents the relationship between directors with multiple outside directorships and SG&A expenses using GMM. Panel D presents the relationship between directors with multiple outside directorships and firm performance (Tobin's Q) using GMM. Financial decisions, multiple outside directorships of board directors and control variables are defined in Appendix 4.1. All continuous variables are winsorized at the 1st and 99th percentiles. The *t*-statistic is reported in parentheses below each coefficient. * denotes significance at the 10% level, ** significance at the 5% level, and *** significance at the 1% level.

4.5.4.4 Propensity score matching (PSM)

Busy directors may be allocated by random appointments to firms. I therefore employ the propensity score matching (PSM) approach in order to tackle this possible selection bias. In the first stage, I run a logistics estimation to predict the possibility of appointing a busy director and include the same control variables from my main regressions, as well as the year and industry (Shipman, Swanquist, & Whited, 2016). The dependent variable is busy director (*Busy04_D)*, a dichotomous variable that equals one if a firm's board has at least one director with four or more outside board seats, and zero if the board has no busy director with four or more outside board seats. The logistic regression results are presented in Table 4.12, Model (1). I then match on a one-to-one nearest neighbor obtained from

logistic regressions without replacement.[35] This approach ensures that each busy director in a firm is paired with a non-busy director in that firm. I combine the treatment sample and the matched sample and perform the regression for all financial-decisions variables. Table 4.12 shows the regression results for the PSM.

In the second stage of the PSM, I only use *Busy04* across *CASH_TA*, *CAPEX_TA*, *SG&A*, and *Tobin's Q* on models (2) to (5), respectively, because *Busy04* is the cut-off point for busy directors. The coefficients of *Busy04* across all regression models are significant at $p<0.05$ or better. The results of the PSM mitigate the effects of selection bias and further reinforce my findings in Table 4.4 – Table 4.7.

Table 4.12 Propensity Score Matching (PSM) Regression Results of Multiple Directorships on Financial Decisions

	First Stage	**Second Stage**			
	Model (1)	**Model (2)**	**Model (3)**	**Model (4)**	**Model (5)**
Variables	***Busy04_D***	***CASH_TA***	***CAPEX_TA***	***SG&A***	***Tobin's Q***
Constant	-5.250***	-0.343***	0.111*	0.202**	1.714**
	(-5.72)	(-5.05)	(1.73)	(2.00)	(2.49)
Busy04		0.025***	-0.024***	0.042***	-0.226**
		(2.67)	(-2.61)	(2.89)	(-2.28)
Bsize	1.878***	0.043	-0.044*	0.015	0.176
	(5.65)	(1.58)	(-1.78)	(0.40)	(0.63)
Ind_Bsize	-0.525**	0.019	0.011	0.001	0.133
	(-2.13)	(1.24)	(0.74)	(0.05)	(0.84)
B_Meeting	-0.134	0.008	-0.005	-0.027*	0.061
	(-0.64)	(0.81)	(-0.49)	(-1.82)	(0.67)
CEO_OWN	2.499**	-0.004	0.129**	-0.031	-0.503
	(2.51)	(-0.06)	(2.01)	(-0.30)	(-0.87)
FAM_OWN	1.021**	-0.038	0.057*	-0.016	-0.021
	(2.29)	(-1.03)	(1.78)	(-0.32)	(-0.07)
Assets $_{(log)}$	0.567***	0.101***	-0.001	0.006	-0.192***
	(11.88)	(15.14)	(-0.18)	(0.55)	(-2.74)
Leverage	-0.998**	-0.114***	-0.019	-0.037	0.326
	(-2.28)	(-4.85)	(-0.82)	(-1.03)	(1.34)
NPPE	-1.127***	-0.194***	0.161***	-0.076**	-0.590**
	(-3.17)	(-7.93)	(6.57)	(-1.97)	(-2.52)
CFO	-0.095	0.199***	0.081**	0.012	0.014
	(-0.08)	(5.80)	(2.37)	(0.23)	(0.04)
Sales_Growth	-0.010	0.000	0.000	0.000	0.001
	(-0.24)	(0.54)	(0.54)	(-0.86)	(0.41)

[35] When I obtain PSM with replacement, the results are not affected.

	First Stage	Second Stage			
	Model (1)	**Model (2)**	**Model (3)**	**Model (4)**	**Model (5)**
Variables	***Busy04_D***	***CASH_TA***	***CAPEX_TA***	***SG&A***	***Tobin's Q***
EBITDA	-1.996	-0.204***	-0.272***	-0.655***	3.714***
	(-1.38)	(-3.35)	(-4.64)	(-7.12)	(5.90)
NWC	-1.420***	0.013	0.036	-0.007	0.063
	(-2.81)	(0.51)	(1.43)	(-0.18)	(0.23)
DIV	-1.206	0.063	0.100	0.159	1.758**
	(-0.68)	(0.85)	(1.39)	(1.40)	(2.37)
Year Dummy	Yes	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes	Yes
Observations	1658	901	901	901	901
R-squared (Pseudo)	(0.1997)	0.4782	0.2008	0.1162	0.1989

Note: This table presents the relation between multiple-directorships on financial decisions using the Propensity score matching (PSM) regression. Model (2) presents the relationship between directors with multiple outside directorships and cash holdings using PSM. Model (3) presents the relationship between directors with multiple outside directorships and capital expenditure using PSM. Model (4) presents the relationship between directors with multiple outside directorships and SG&A expenses using PSM. Model (5) presents the relationship between directors with multiple outside directorships and firm performance (Tobin's Q) using PSM. In the first stage, I run logistics regression and the dependent variable is busy director (Busy04_D), a dichotomous variable that equals one if a firm's board has at least one director with four or more outside board seats, and zero if the board has no busy director with four or more outside board seats, the results are presented Model (1). In the second stage, I use the percentage of busy directors who hold four or more directorships to measure director busyness (Busy04). Financial decisions, multiple outside directorships of board directors and control variables are defined in Appendix 4.1. All continuous variables are winsorized at the 1st and 99th percentiles. The *t*-statistic is reported in parentheses below each coefficient. * denotes significance at the 10% level, ** significance at the 5% level, and *** significance at the 1% level.

4.5.4.5 Heckman selection model (inverse Mills ratio)

The potential bias may arise from busy directors as they might be unable to provide effective monitoring, hence resulting in poor financial decisions. To monitor possible self-selection bias in our sample and control for potential endogeneity problem due to an omitted variable bias, we use the Heckman (1979) two-stage procedure. In the first stage, we perform the analysis based on the level of director's busyness by employing a logistic estimation in order to predict the probability of a busy director. I construct a dummy variable that takes a value of one if the director is busy, and zero otherwise, and report the results in Appendix 4.2, Models (1)-(4). The dependent variable in Models (1) and (2) of Appendix 4.2 is a dummy variable that takes a value of one if all directors have outside directorships, and zero otherwise (*Busy_Bsize_D*). The dependent variable in Models (3) and (4) of Appendix 4.2 is a dummy variable that takes a value of one if a director holds four or more directorships, and zero otherwise (*Busy04_D*). The independent variables in the first stage are selected from the director with multiple directorships literature that are commonly found for explaining the firm's decision to use busy director. In the second stage,

I add an inverse Mills ratio obtained from the first stage in order to control for possible self-selection bias in the sample (Tucker, 2010).

Table 4.13 presents the results of the second stage of the Heckman two-stage model. Panel A shows that the coefficients for directors' busyness and *CASH_TA* in models (1) to (4) are positively significant. Panel B shows a significant negative estimated coefficient for directors' busyness and *CAPEX_TA* in all models. In all models in Panel C, the coefficients for directors' busyness and *SG&A* are positive and significant. Finally, I find that Tobin's Q is reduced by directors' busyness for all models. Hence, after controlling for selection bias of the sample using the Heckman two-stage method, the results are similar to my findings in Table 4.4 – Table 4.7.

Table 4.13 Heckman Selection Regression Results of Multiple Directorships on Financial Decisions

Panel A: Cash Holdings as Dependent				
Variables	**Model (1)**	**Model (2)**	**Model (3)**	**Model (4)**
Constant	-0.233***	-0.209**	-0.353***	-0.345***
	(-2.64)	(-2.37)	(-4.14)	(-4.03)
Inverse-Mills	0.034	0.030	0.064***	0.062***
	(0.91)	(0.78)	(2.71)	(2.61)
Busy_Bsize	0.033***			
	(3.32)			
$Busy_{(log)}$		0.007***		
		(2.66)		
Busy04			0.024***	
			(3.06)	
$Busy04_{(log)}$				0.006***
				(2.75)
Control Variables	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1658	1650	1650	1650
R-squared	0.4159	0.4134	0.4177	0.4170

Table 4.13 (continued)

Panel B: Capital Expenditure as Dependent				
Variables	**Model (1)**	**Model (2)**	**Model (3)**	**Model (4)**
Constant	0.204**	0.191**	0.303***	0.298***
	(2.52)	(2.35)	(4.21)	(4.13)
Inverse-Mills	-0.073**	-0.072**	-0.083***	-0.081***
	(-2.11)	(-2.07)	(-4.29)	(-4.18)
Busy_Bsize	-0.024***			
	(-2.69)			
$Busy_{(log)}$		-0.004*		
		(-1.66)		
Busy04			-0.012*	
			(-1.67)	
$Busy04_{(log)}$				-0.004**
				(-1.99)
Control Variables	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1658	1650	1650	1650
R-squared	0.1447	0.1419	0.1517	0.1524

Panel C: SG&A Expenses as Dependent				
Variables	**Model (1)**	**Model (2)**	**Model (3)**	**Model (4)**
Constant	0.789***	0.804***	0.593***	0.607***
	(5.23)	(5.32)	(4.03)	(4.12)
Inverse-Mills	-0.223***	-0.229***	-0.080*	-0.084**
	(-3.46)	(-3.53)	(-1.95)	(-2.04)
Busy_Bsize	0.041**			
	(2.45)			
$Busy_{(log)}$		0.015***		
		(3.58)		
Busy04			0.029**	
			(2.08)	
$Busy04_{(log)}$				0.009**
				(2.19)
Control Variables	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1658	1650	1650	1650
R-squared	0.1087	0.1130	0.1025	0.1028

Table 4.13 (continued)

Panel D: Tobin's Q as Dependent				
Variables	**Model (1)**	**Model (2)**	**Model (3)**	**Model (4)**
Constant	3.600***	3.398***	4.645***	4.503***
	(4.27)	(4.02)	(5.70)	(5.52)
Inverse-Mills	-1.033***	-0.992***	-1.057***	-1.008***
	(-2.87)	(-2.74)	(-4.65)	(-4.42)
Busy_Bsize	-0.398***			
	(-4.25)			
$Busy_{(log)}$		-0.100***		
		(-4.21)		
Busy04			-0.237***	
			(-3.11)	
$Busy04_{(log)}$				-0.084***
				(-3.71)
Control Variables	Included	Included	Included	Included
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1658	1650	1650	1650
R-squared	0.1527	0.1525	0.1575	0.1599

Note: This table presents the relationship between multiple directorships on financial decisions using Heckman selection regression. I perform the analysis based on the level of director's busyness. In the first stage, I employ logistic estimation in order to predict the probability of a director being busy; the results are reported in Appendix 4.2. The dependent variable in models (2) and (3) is a dummy variable that takes a value of one if all directors have outside directorships, and zero otherwise (Busy_Bsize_D). The dependent variable in models (4) and (5) is a dummy variable that takes a value of one if a director holds four or more directorships, and zero otherwise (Busy04_D). In the second stage, I add an inverse Mills ratio that is obtained from the first stage to control possible self-selection bias of the sample. Panel A presents the relationship between directors with multiple outside directorships and cash holdings using Heckman selection model. Panel B presents the relationship between directors with multiple outside directorships and capital expenditure using Heckman selection model. Panel C presents the relationship between directors with multiple outside directorships and SG&A expenses using Heckman selection model. Panel D presents the relationship between directors with multiple outside directorships and firm performance (Tobin's Q) using Heckman selection model. Financial decisions, multiple outside directorships of board directors and control variables are defined in Appendix 4.1. All continuous variables are winsorized at the 1st and 99th percentiles. The *t*-statistic is reported in parentheses below each coefficient. * denotes significance at the 10% level, ** significance at the 5% level, and *** significance at the 1% level.

4.5.4.6 Further robustness test

I conduct a further test to account for the asymmetry between increases or decreases in revenue (aggregate demand) against the cost stickiness notion by Anderson et al. (2003). Anderson et al. (2003) argues the proportion of cost increased in relation to the increase in aggregate demand is greater than the proportion of cost decreased when there is a reduction in aggregate demand. Due to the sticky nature of cost, an increase in the presence of busy directors on firm's board would potentially allow for an increase in SG&A expenses and the cost stickiness issue might have caused distortions in my results for increase in SG&A expenses (Table 4.6). Following Anderson et al. (2003), I propose the following model to test for cost stickiness:

$$ln\left[\frac{SG\&A_{i,t}}{SG\&A_{i,t-1}}\right] = B_0 + B_1 ln\left[\frac{Revenue_{i,t}}{Revenue_{i,t-1}}\right] + B_2 Decrease\_Dummy_{i,t} * ln\left[\frac{Revenue_{i,t}}{Revenue_{i,t-1}}\right] + \varepsilon_{i,t} \quad \text{(Equation 4.2)}$$

where *Decrease Dummy*$_{i,t}$ takes the value of 1 when revenue of firm (*i*) in period (*t*) decreases than that in the preceding period (*t*-1), and 0 otherwise.

The coefficient B_1 calculates the percentage increase in *SG&A* costs in response to a 1 percent increase in sales revenue. The coefficient $B_1 + B_2$ calculates the increase in *SG&A* costs in response to a 1 percent decrease in sales revenue. Hence, the empirical hypothesis to test the stickiness of *SG&A* costs is dependent on $B_1 > 0$ and $B_2 < 0$. I apply the above model based on the presence of busy directors by constructing 2 subsamples: *Busy_Bsize_D*[36] and *Busy04_D*[37]. The first regression result for the *Busy_Bsize_D* subsample is as follows:

$$ln\left[\frac{SG\&A_{i,t}}{SG\&A_{i,t-1}}\right] = 0.050 + 0.346\, ln\left[\frac{Revenue_{i,t}}{Revenue_{i,t-1}}\right] + -0.223 * Decrease\_Dummy_{i,t} * ln\left[\frac{Revenue_{i,t}}{Revenue_{i,t-1}}\right] + \varepsilon_{i,t}. \quad \text{(Equation 4.3)}$$

t-statistic *(5.27)* *(10.32)* *(-4.05)*

The estimated value of B_1 is 0.346 (*t*-statistic =10.32), showing that *SG&A* costs increase 0.35% for 1% increase in revenues if there is an existence of *Busy_Bsize_D* in a firm. The estimated value of B_2 of -0.223 (*t*-statistic = -4.05) provides an evidence of the presence of the sticky costs' hypothesis in listed GCC firms with the existence of busy directors. The sum value of $B_1 + B_2$ =0.123 provides that *SG&A* costs decrease 0.123% for each percent decrease in revenues based on the existence of *Busy_Bsize_D* in a firm. My results in B_1 and $B_1 + B_2$ are statistically significant at p <0.01.

The second regression result for the *Busy04_D* subsample is as follows:

$$ln\left[\frac{SG\&A_{i,t}}{SG\&A_{i,t-1}}\right] = 0.061 + 0.276\, ln\left[\frac{Revenue_{i,t}}{Revenue_{i,t-1}}\right] + -0.152 * Decrease\_Dummy_{i,t} * ln\left[\frac{Revenue_{i,t}}{Revenue_{i,t-1}}\right] + \varepsilon_{i,t} \quad \text{(Equation 4.4)}$$

t-statistic *(5.06)* *(6.42)* *(-2.23)*

I also re-estimate the model by using *Busy04_D* to check for comparative purposes, I find similar findings. These results provide supporting evidence of the cost stickiness hypothesis that the presence of busy directors in a firm may allow mangers to manipulate cost asymmetry.

[36] *Busy_Bsize_D* is a dummy variable that takes a value of 1 if all directors have outside directorships.

[37] *Busy04_D* is a dummy variable takes a value of 1 if a director holds four or more directorships.

4.6 Conclusion

This research examines the impact of directors holding multiple directorships (directors' busyness) on both the financial decisions of firms, specifically cash holdings, capital expenditure and SG&A expenses, and firm performance. Corporate reformers and academia disagree about the effects of board directors' busyness, and the former recommends reducing the number of board seats that members can hold. However, empirical studies have shown mixed findings on the influence of busy directors. I find that board directors' busyness may be universally detrimental to financial decisions. I further examine the effect of directors' busyness on financial decisions across the life cycle stages of firms. Using nonfinancial, publicly listed firms from the six GCC countries in the 2006–2016 period, my empirical study provides evidence that firms with boards of busy directors increase cash holdings, reduce firm investment opportunities by reducing capital expenditure, increase SG&A expenses, and decrease firm performance. Furthermore, I find evidence that firms with busy directors increase cash holdings in the introduction, maturity and shakeout stages of the firm life cycle; decrease investment in the maturity, shakeout, and decline stages; boost SG&A expenses in the introduction and growth stages; and diminish firm performance in the introduction, maturity and growth stages of the firm life cycle. My results remain robust when I use alternative measures of financial decisions and multiple directorships. I also apply the GMM, PSM and inverse Mills ratio models to test endogeneity and to minimize the possibility that my results are correlative rather than causal. My empirical results are consistent with prior literature suggesting that increasing the number of busy directors is not always in the best interests of financial decisions and shareholders. This outcome arises because such directors provide less effective monitoring of management due to their service on many boards.

The results from my study are useful for regulators, policymakers, practitioners, and academic scholars. One implication of my findings is that standard-setters should implement legislation that places a cap on the number of outside board seats that board directors of listed firms can hold, in order to protect firms' financial decisions and shareholders' interests. In addition, the study's findings suggest that firms may choose busy directors inappropriately for financial decisions during life cycle stages of their firm. Thus, regulators should consider the dynamics of corporate life cycle in order to improve corporate governance systems in firms. Future research could explore empirically whether and how demographic characteristics of busy directors at different stages of the life cycle influence firms' market-risk disclosures, investment efficiency and accounting conservatism, among other factors. This will provide valuable insights into strengthening corporate governance internationally.

This study does have some limitations. Because my study sample is based on publicly listed GCC firms, my sample may have selection bias. In addition, the study is region specific and thus the findings may not be generalizable to other countries with different cultural mores, backgrounds, and corporate-governance environments. Future research may yield different findings and provide further policy implications. Moreover, since financial listed firms were excluded from my study, future studies could obtain new insights into these firms.

Appendices

Appendix 4.1 Variable Definitions

Variables	Definition and Measurement
Dependent Variable	
CASH_TA	The ratio of cash and marketable securities to total assets.
CAPEX_TA	The ratio of capital expenditure made during year to total assets.
SG&A	The ratio of selling, general and administrative expenses to total sales.
Tobin's Q	The sum of total market value of equity and book value of total liabilities, scaled by book value of total assets.
Independent Variable	
Busy_Bsize	The total number of outside board seats held by each director, scaled by the total number of members on the board or board size.
$Busy_{(log)}$	Natural logarithm of the total number of outside board seats that are held by all of the board directors.
Busy04	The percentage of total number of directors who hold four or more outside directorships.
$Busy04_{(log)}$	Natural logarithm of the total number of directorships that are held by directors who have four or more outside directorships.
Control Variables	
Bsize	Number of directors sitting on the board of directors.
Ind_Bsize	The proportion of independent directors to the total members on the board.
B_Meeting	The total number of meetings of the board held over the year.
CEO_OWN	The percentage of the total number of shares owned by CEO to total number of outstanding shares.
FAM_OWN	The percentage of the total number of shares owned by family to total number of outstanding shares.
$Assets_{(log)}$	Natural logarithm of total assets, calculated at the end of the fiscal year.
Leverage	Total debt of firm, divided by total assets of firm at the fiscal year end.
NPPE	Net plant, property and equipment, scaled by total assets.
CFO	The ratio of cash from operations to total assets.
Sales_Growth	Sales in current year minus the previous year's sales, scaled by the previous year's sales.
EBITDA	Earnings before interest, taxes, depreciation and amortisation, scaled by total assets.
NWC	Ratio of net working capital to total assets.
DIV	Total dividends, scaled by total assets.
Year	Dummy variables in order to control for fiscal year.

Appendix 4.2 Logistic regression used in the first stage of PSM and Heckman methods.

	Heckman			
	Busy_Bsize_D		Busy04_D	
Variables	**Model (1)**	**Model (2)**	**Model (3)**	**Model (4)**
Constant	-3.213***	-3.215***	-3.276***	-3.276***
	(-5.80)	(-5.80)	(-5.62)	(-5.62)
Bsize	1.449***	1.449***	0.956***	0.956***
	(7.03)	(7.03)	(4.69)	(4.69)
Ind_Bsize	0.640***	0.645***	-0.082	-0.082
	(3.86)	(3.88)	(-0.51)	(-0.51)
B_Meeting	-0.128	-0.128	-0.101	-0.101
	(-0.94)	(-0.94)	(-0.79)	(-0.79)
CEO_OWN	-0.025	-0.022	1.869***	1.869***
	(-0.04)	(-0.04)	(3.14)	(3.14)
FAM_OWN	0.470	0.471	0.331	0.331
	(1.55)	(1.56)	(1.19)	(1.19)
Assets $_{(log)}$	0.214***	0.214***	0.384***	0.384***
	(7.76)	(7.76)	(12.84)	(12.84)
Leverage	-0.041	-0.043	-0.701***	-0.701***
	(-0.17)	(-0.18)	(-2.62)	(-2.62)
NPPE	-0.461**	-0.461**	-0.774***	-0.774***
	(-2.18)	(-2.18)	(-3.58)	(-3.58)
CFO	0.945	0.948	0.005	0.005
	(1.31)	(1.32)	(0.01)	(0.01)
Sales_Growth	-0.014	-0.013	-0.042	-0.042
	(-0.45)	(-0.44)	(-1.33)	(-1.33)
EBITDA	-0.998	-1.007	-1.249	-1.249
	(-1.15)	(-1.16)	(-1.40)	(-1.40)
NWC	-0.147	-0.147	-0.850***	-0.850***
	(-0.49)	(-0.49)	(-2.75)	(-2.75)
DIV	-0.426	-0.408	-0.447	-0.447
	(-0.39)	(-0.38)	(-0.41)	(-0.41)
Year Dummy	Yes	Yes	Yes	Yes
Firm Fixed Effect	Yes	Yes	Yes	Yes
Observations	1658	1650	1650	1650
R-squared	0.1617	0.1617	0.2596	0.2596

Chapter Five

5

Conclusion

5.1 Introduction

The markets of the GCC countries are typically smaller, less liquid and less integrated than developed markets. Over the past three decades, GCC governments have played an active role in their countries' economic development process by adopting open-door economic policies, which has helped diversify their economies away from reliance on oil and gas production. Several factors notably contribute to the uniqueness of the economies of these countries. For example, the absence of corporate and personal taxes has attracted the attention of international investors targeting higher returns, which promotes diversification. In addition, corporate governance practices in GCC countries are in the early stages of development, and compliance with some corporate governance codes is not mandatory in most countries. The three essays in this thesis investigates the issues of accounting conservatism in Saudi Arabia, and the impact of family control and board directors' busyness on financial decisions in GCC countries.

5.2 Summary of Major Findings

The first essay reports an investigation into the relationship between firms' boards with directors who are members of the royal family and accounting conservatism in Saudi Arabia. The study adopts three measures for accounting conservatism: a market-based measure (Beaver and Ryan, 2000), an accrual-based measure (Givoly and Hayn, 2000), and an asymmetric timeliness measure (Basu, 1997). The study finds supporting evidence that politically connected firms (measured by the presence of royal-family directors on the board) have less conservative accounting practices. The results are robust to different measures of political connection and endogeneity tests such as the moderating effect estimation, propensity-score matching and two-stage least squares (2SLS) approaches. In addition, it is found that compliance with corporate governance regulations became mandatory in 2010 mitigates the influence of ruling-family directors on conservatism. The evidence presented in this study is supported by the theory of power (French & Raven, 1959), which suggests that powerful individuals in a society can dominate other individuals using a number of influential means, including reward. Consistently, royal directors on a board are able to influence management's decisions by guaranteeing larger financial benefits and legal protection; management can therefore exercise opportunistic reporting behaviour in which less than optimal accounting policies are employed. This study contributes to both the theory of power and agency theory by providing important

complementary evidence in a unique political setting. The study's findings show that, as the theory of power predicts, agency costs increase in the presence of royal directors.

The second essay examines the influence of family control on the level of corporate cash holdings in the six GCC countries. The study found that family-controlled firms hold less cash, which holds true across different measures of family control. Compared with non-family-controlled firms, family-controlled firms have significantly lower levels of cash in the growth, maturity and shakeout stages of the life cycle. In addition, family-controlled firms have a higher level of investment in the maturity stage of their life cycle. Overall, the findings provide evidence that family-controlled firms in developing markets such as the GCC countries tend to hold lower levels of cash than their non-family counterparts due to their ability to sustain a competitive advantage through family connections. The findings further suggest that family-controlled firms reduce cash holdings to mitigate agency-related risks that may arise between managers and shareholders.

The third essay reports a study of directors with multiple directorships and finds that firms with these "busy directors" increase cash holdings and selling, general and administrative (SG&A) expenses. Further, firms with busy directors have significantly lower capital expenditure and firm performance. Moreover, the effect of directors' busyness on financial decisions differs significantly across the firm life-cycle stages. Directors' busyness induces more cash holdings for firms in the introduction, maturity and shakeout stages, while such directors reduce capital expenditure in the maturity and shake-out stages. In addition, directors' busyness increases SG&A expenses in the introduction and growth stages, and decreases firm performance in the introduction, maturity and growth stages. Collectively, these findings suggest that "type one" agency problems may arise when the directors hold multiple directorships, because this permits CEOs to generate information asymmetry for board directors and stakeholders (Jensen & Meckling, 1976).

In conclusion, the three essays in this thesis make theoretical and practical contributions to the literature on the issues of accounting conservatism and the impact of family control and board busyness on financial decisions. While these studies focus on GCC countries, the implications of the findings for capital markets may be relevant for other economies. For example, the findings may be extrapolated to other emerging or newly developed economies, such as many economies in South-East Asia, South America and even to some developed Western economies.

5.3 Directions for Future Research

The findings from the three studies presented in this thesis provide a framework for key stakeholders, including scholars, regulators and investors, to understand and future research the behaviour of publicly listed firms in the GCC region. The findings contribute to understanding of the corporate governance, accounting conservatism and corporate financial decisions.

The first essay significantly contributes to my understanding that political connections (i.e. with ruling family) are a major factor that reduces practice of accounting conservatism in Saudi publicly listed firms. This effect on accounting conservatism was mitigated in 2010 when compliance with corporate governance regulations became mandatory in the state. However, as with any research, this study has limitations. For example, financial regulated firms were excluded from the study sample because they operate under different legislature. Hence, the findings of this research cannot be extended to these institutions. Future research could investigate the influence of royal-family board membership on investment efficiency and the effectiveness of various board committees. Finally, various participants in the capital market such as regulators, government administrators, shareholders, financial analysts and auditors could apply the findings of this study to investigate why firms are reluctant to disclose accounting conservatism.

Findings reported in the second essay show that family control in firms influences the level of cash holdings across the various life-cycle stages. However, these findings refer only to GCC firms and may not apply in other countries. Future studies should include countries with governance and institutional mechanisms different from GCC countries to gain a more precise understanding of financial decision making in family firms regarding dominant economic determinants. Acknowledging the importance and prevalence of family-controlled firms in the economy, more research on firms' decision-making mechanisms in relation to family control is required. Further, family-controlled firms and non-family-controlled firms should be compared; for example, to compare their levels of disclosure about business activities and transactions, and to determine whether they differ regarding cost capitalisation and impairment of assets and reporting policies among various international institutional settings. These factors provide interesting avenues for future research.

The empirical evidence presented in the third essay is useful for policymakers, regulators, academic scholars and practitioners. The evidence suggests legislation is

required to curtail the number of outside board seats that the directors of listed firms can hold in order to protect firms' financial decisions and their shareholders. The results also question the choice of busy directors in different stages of firms' life cycles. If regulators seek to improve corporate governance systems in firms, the findings suggest they must consider the dynamics of the corporate life cycle.

Despite the contributions of this research, more insight is required to fully understand the influence of board-member busyness. For instance, researchers could examine the effect of director busyness on factors such as market-risk disclosure, management of real earnings and investment efficiency at different life-cycle stages. Such information would provide valuable insights on how to strengthen international corporate governance. This study is limited because the sample for analysis was restricted to publicly listed GCC firms. Thus, the study is region specific and the findings may not apply in countries with different backgrounds, cultural exposures and corporate governance regulations. Future research may yield different findings and provide further policy implications. Moreover, the exclusion of financial listed firms from my study leaves room for new insights into this group of firms.

References

Aaltonen, A. (2013). Environmental, social and corporate governance practices in the MENA region 2007–2012. Available at: http://www.hawkamah.org/uploads/Review-of-ESG-practices-in-the-MENA-Region-2007-2012.pdf.

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

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.

Agha, M., & Eulaiwi, B. (2020). The alignment effects of CEO stock incentives in the presence of government ownership: International evidence from Gulf Cooperation Council countries. *Australian Journal of Management, 45*(2), 195-222.

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

Ahmed, A. S. (1994). Accounting earnings and future economic rents: An empirical analysis. *Journal of Accounting and Economics, 17*(3), 377-400.

Ahmed, A. S., Billings, B. K., Morton, R. M., & Stanford-Harris, M. (2002). The role of accounting conservatism in mitigating bondholder-shareholder conflicts over dividend policy and in reducing debt costs. *The Accounting Review, 77*(4), 867-890.

Ahmed, A. S., & Duellman, S. (2007). Accounting conservatism and board of director characteristics: An empirical analysis. *Journal of Accounting and Economics, 43*(2-3), 411-437.

Ahmed, A. S., & Duellman, S. (2013). Managerial overconfidence and accounting conservatism. *Journal of Accounting Research, 51*(1), 1-30.

Ahmed , K., & Henry, D. (2012). Accounting conservatism and voluntary corporate governance mechanisms by Australian firms. *Accounting & Finance, 52*(3), 631-662.

Ahn, S., Jiraporn, P., & Kim, Y. S. (2010). Multiple directorships and acquirer returns. *Journal of Banking & Finance, 34*(9), 2011-2026.

Al-Abbas, M. (2009). Corporate governance and earnings management: An empirical study of the Saudi market. *The Journal of American Academy of Business, 15*(1).

Al-Alkim, H. H. (1996). The prospect of democracy in the GCC countries. *Critique: Critical Middle Eastern Studies, 5*(9), 29-41.

Al-Hadi, A., Taylor, G., & Al-Yahyaee, K. H. (2016). Ruling family political connections and risk reporting: Evidence from the GCC. *International Journal of Accounting, 51*(4), 504-524.

Al-Malkawi, H.-A. N., Pillai, R., & Bhatti, M. (2014). Corporate governance practices in emerging markets: The case of GCC countries. *Economic Modelling, 38*, 133-141.

Al-Matari, Y., Al-Swidi, A., Fadzil, F., Fadzil, H., & Al-Matari, E. (2012). Board of directors, audit committee characteristics and the performance of Saudi Arabia listed companies. *International Review of Management and Marketing, 2*(4), 241.

Al-Musalli, M. A. K., & Ismail, K. N. I. K. (2012). Intellectual capital performance and board characteristics of GCC banks. *Procedia Economics and Finance, 2*, 219-226.

Al-Nodel, A., & Hussainey, K. (2010). Corporate governance and financing decisions by Saudi companies. *Journal of Modern Accounting and Auditing, 6*(8), 1.

Al-Okaily, J., & Naueihed, S. (2019). Audit committee effectiveness and family firms: Impact on performance. *Management Decision.* Available at: http://doi.org/10.1108/MD-04-2018-0422.

Al-Shammari, B., Brown, P., & Tarca, A. (2008). An investigation of compliance with international accounting standards by listed companies in the Gulf Co-Operation Council member states. *The International Journal of Accounting, 43*(4), 425-447.

Al-Yahyaee, K. H., Pham, T. M., & Walter, T. S. (2011). The information content of cash dividend announcements in a unique environment. *Journal of Banking & Finance, 35*(3), 606-612.

Al-Zamil, A. (1981). The petrochemical industry in the Kingdom of Saudi Arabia. *The Journal of Energy and Development*, 205-212.

Al-Yousef, K. Y. (2008). Opinion: When rulership becomes privileged booty (ghanīmah): The condition of the Gulf Cooperation Council. *Contemporary Arab Affairs, 1*(4), 631-648.

Al–Twaijry, A. A. M., Brierley, J. A., & Gwilliam, D. R. (2002). An examination of the role of audit committees in the Saudi Arabian corporate sector. *Corporate Governance: An International Review, 10*(4), 288-297.

Albrecht, C., Holland, D., Malagueño, R., Dolan, S., & Tzafrir, S. (2015). The role of power in financial statement fraud schemes. *Journal of Business Ethics, 131*(4), 803-813.

Ali, A., Chen, T.-Y., & Radhakrishnan, S. (2007). Corporate disclosures by family firms. *Journal of Accounting and Economics, 44*(1-2), 238-286.

Al Janabi, M. A., Hatemi-J, A., & Irandoust, M. (2010). An empirical investigation of the informational efficiency of the GCC equity markets: Evidence from bootstrap simulation. *International Review of Financial Analysis, 19*(1), 47-54.

Alnori, F., & Alqahtani, F. (2019). Capital structure and speed of adjustment in non-financial firms: Does sharia compliance matter? Evidence from Saudi Arabia. *Emerging Markets Review, 39*, 50-67.

Alshehri, A., & Solomon, J. (2012). *The evolution of corporate governance in Saudi Arabia.* Paper presented at the *British Accounting and Finance Association (BAFA)* 2012, *Conference Paper,* Brighton, UK.

Alzahrani, Y. (2013). The corporate governance in Saudi listed companies. *International Journal of Humanities and Management Sciences, 1*(4), 243-245.

Alzharani, A. M., Ahmad, A., & Aljaaidi, K. (2011). An empirical investigation of factors associated with firm performance: Evidence from Kingdom of Saudi Arabia. *International Conference on E-business, Management and Economics* Analysis, *25*(4), 30-36.

Amore, M. D., & Bennedsen, M. (2013). The value of local political connections in a low-corruption environment. *Journal of Financial Economics, 110*(2), 387-402.

Anderson, M. C., Banker, R. D., & Janakiraman, S. N. (2003). Are selling, general, and administrative costs "sticky"? *Journal of Accounting Research, 41*(1), 47-63.

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. *The 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.

Andres, C., Van Den Bongard, I., & Lehmann, M. (2013). Is busy really busy? Board governance revisited. *Journal of Business Finance & Accounting, 40*(9-10), 1221-1246.

Arellano, M., & Bover, O. (1995). Another look at the instrumental variable estimation of error-components models. *Journal of Econometrics, 68*(1), 29-51.

Armstrong, C. S., Guay, W. R., & Weber, J. P. (2010). The role of information and financial reporting in corporate governance and debt contracting. *Journal of Accounting and Economics, 50*(2-3), 179-234.

Astrachan, J. H., Klein, S. B., & Smyrnios, K. X. (2002). The F-PEC scale of family influence: A proposal for solving the family business definition problem1. *Family Business Review, 15*(1), 45-58.

Ball, R., Kothari, S., & Robin, A. (2000). The effect of international institutional factors on properties of accounting earnings. *Journal of Accounting and Economics, 29*(1), 1-51.

Ball, R., & Shivakumar, L. (2005). Earnings quality in UK private firms: Comparative loss recognition timeliness. *Journal of Accounting and Economics, 39*(1), 83-128.

Banker, R. D., Byzalov, D., Ciftci, M., & Mashruwala, R. (2014). The moderating effect of prior sales changes on asymmetric cost behavior. *Journal of Management Accounting Research, 26*(2), 221-242.

Barnes, M. L., & Hughes, A. T. W. (2002). A quantile regression analysis of the cross section of stock market returns. *Working Paper 02–2. Federal Reserve Bank of Boston.*

Bartholomeusz, S., & Tanewski, G. A. (2006). The relationship between family firms and corporate governance. *Journal of Small Business Management, 44*(2), 245-267.

Basu, S. (1997). The conservatism principle and the asymmetric timeliness of earnings 1. *Journal of Accounting and Economics, 24*(1), 3-37.

Basu, S. (2005). Discussion of 'Conditional and unconditional conservatism: Concepts and modeling'. *Review of Accounting Studies, 10*(2-3), 311-321.

Bates, T. W., Kahle, K. M., & Stulz, R. M. (2009). Why do US firms hold so much more cash than they used to? *The Journal of Finance, 64*(5), 1985-2021.

Baydoun, N., William, M., Neal, R., & Roger, W. (2013). Corporate governance in five Arabian Gulf countries. *Managerial Auditing Journal, 28*(1), 7-22.

Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *Accounting review, 71*, 443-465.

Beaver, W. H., & Ryan, S. G. (2000). Biases and lags in book value and their effects on the ability of the book-to-market ratio to predict book return on equity. *Journal of Accounting Research, 38*(1), 127-148.

Belloumi, M., & Alshehry, A. (2018). The impacts of domestic and foreign direct investments on economic growth in Saudi Arabia. *Economies, 6*(1), 18.

Bezrukova, K., Jehn, K. A., Zanutto, E. L., & Thatcher, S. M. (2009). Do workgroup faultlines help or hurt? A moderated model of faultlines, team identification, and group performance. *Organization Science, 20*(1), 35-50.

Bhojraj, S., & Sengupta, P. (2003). Effect of corporate governance on bond ratings and yields: The role of institutional investors and outside directors. *The Journal of Business, 76*(3), 455-475.

Biddle, G. C., Hilary, G., & Verdi, R. S. (2009). How does financial reporting quality relate to investment efficiency? *Journal of Accounting and Economics, 48*(2), 112-131.

Biddle, G. C., Ma, M. L., & Song, F. M. (2020). Accounting conservatism and bankruptcy risk. *Journal of Accounting, Auditing and Finance, Forthcoming.*

Bley, J., & Chen, K. H. (2006). Gulf Cooperation Council (GCC) stock markets: The dawn of a new era. *Global Finance Journal, 17*(1), 75-91.

Bley, J., & Saad, M. (2012). Idiosyncratic risk and expected returns in frontier markets: Evidence from GCC. *Journal of International Financial Markets, Institutions and Money, 22*(3), 538-554.

Bliss, J. H. (1924). *Management through accounts*: New York: The Ronald Press Co.

Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of Econometrics, 87*(1), 115-143.

Bonn, I., & Pettigrew, A. (2009). Towards a dynamic theory of boards: An organisational life cycle approach. *Journal of Management & Organization, 15*(1), 2-16.

Boone, A. L., Field, L. C., Karpoff, J. M., & Raheja, C. G. (2007). The determinants of corporate board size and composition: An empirical analysis. *Journal of Financial Economics, 85*(1), 66-101.

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

Boubakri, N., Cosset, J. C., & Saffar, W. (2012). The impact of political connections on firms' operating performance and financing decisions. *Journal of Financial Research, 35*(3), 397-423.

Boubakri , N., Sattar, A. M., & Saffar , W. (2013). Political institutions, connectedness, and corporate risk-taking. *Journal of International Business Studies, 44*(3), 195.

Boubaker, S., Derouiche, I., & Nguyen, D. K. (2015). Does the board of directors affect cash holdings? A study of French listed firms. *Journal of Management & Governance, 19*(2), 341-370.

Brenes, E. R., Madrigal, K., & Requena, B. (2011). Corporate governance and family business performance. *Journal of Business Research, 64*(3), 280-285.

Brown, A. B., Dai, J., & Zur, E. (2019). Too busy or well-connected? Evidence from a shock to multiple directorships. *The Accounting Review, 94*(2), 83-104.

Bushman , R., Chen, Q., Engel, E., & Smith, A. (2004). Financial accounting information, organizational complexity and corporate governance systems. *Journal of Accounting and Economics, 37*(2), 167-201.

Bushman, R. M., & Piotroski, J. D. (2006). Financial reporting incentives for conservative accounting: The influence of legal and political institutions. *Journal of Accounting and Economics, 42*(1-2), 107-148.

Callen, M. T., Cherif, R., Hasanov, F., Hegazy, M. A., & Khandelwal, P. (2014). *Economic diversification in the GCC: Past, present, and future.* International Monetary Fund.

Cashman, G. D., Gillan, S. L., & Jun, C. (2012). Going overboard? On busy directors and firm value. *Journal of Banking & Finance, 36*(12), 3248-3259.

Chalevas, C. G. (2011). The effect of the mandatory adoption of corporate governance mechanisms on executive compensation. *International Journal of Accounting, 46*(2), 138-174.

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

Che, L., & Langli, J. C. (2015). Governance structure and firm performance in private family firms. *Journal of Business Finance & Accounting, 42*(9-10), 1216-1250.

Chen, C., Lu, H., & Sougiannis, T. (2012). The agency problem, corporate governance, and the asymmetrical behavior of selling, general, and administrative costs. *Contemporary Accounting Research, 29*(1), 252-282.

Chen, D. (2008). *The monitoring and advisory functions of corporate boards: Theory and evidence*. Working Paper. Baltimore, MD: University of Baltimore. Available at: ssrn.com/abstract=1327066.

Chen, Q., Hemmer, T., & Zhang, Y. (2007). On the relation between conservatism in accounting standards and incentives for earnings management. *Journal of Accounting Research, 45*(3), 541-565.

Chen, S., & Chen, I. (2012). Corporate governance and capital allocations of diversified firms. *Journal of Banking & Finance, 36*(2), 395-409.

Chi, W., Liu, C., & Wang, T. (2009). What affects accounting conservatism: A corporate governance perspective. *Journal of Contemporary Accounting & Economics, 5*(1), 47-59.

Chou, T.-K., & Feng, H.-L. (2019). Multiple directorships and the value of cash holdings. *Review of Quantitative Finance and Accounting, 53*(3), 663-699.

Chrisman, J. J., Chua, J. H., Kellermanns, F. W., & Chang, E. P. (2007). Are family managers agents or stewards? An exploratory study in privately held family firms. *Journal of Business Research, 60*(10), 1030-1038.

Chrisman, J. J., Chua, J. H., & Litz, R. A. (2004). Comparing the agency costs of family and non–family firms: Conceptual issues and exploratory evidence. *Entrepreneurship Theory and Practice, 28*(4), 335-354.

Chung, K. H., Kim, J. C., Kim, Y. S., & Zhang, H. (2015). Information asymmetry and corporate cash holdings. *Journal of Business Finance & Accounting, 42*(9-10), 1341-1377.

Chung, R., Firth, M., & Kim, J.-B. (2003). Auditor conservatism and reported earnings. *Accounting and Business Research, 33*(1), 19-32.

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

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.

Cooper, E., & Uzun, H. (2012). Directors with a full plate: The impact of busy directors on bank risk. *Managerial Finance, 38*(6), 571-586.

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.

Council for Institutional Investors. (1998). *Corporate Governance Policies*: *Core policies, positions and explanatory notes*. https://www.cii.org/corp_gov_policies.

Cronqvist, H., & Nilsson, M. (2003). Agency costs of controlling minority shareholders. *Journal of Financial and Quantitative Analysis, 38*(4), 695-719.

Danes, S. M., Stafford, K., Haynes, G., & Amarapurkar, S. S. (2009). Family capital of family firms: Bridging human, social, and financial capital. *Family Business Review, 22*(3), 199-215.

Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a stewardship theory of management. *Academy of Management Review, 22*(1), 20-47.

DeAngelo, H., DeAngelo, L., & Stulz, R. M. (2006). Dividend policy and the earned/contributed capital mix: A test of the life-cycle theory. *Journal of Financial Economics, 81*(2), 227-254.

Dehejia, R. H., & Wahba, S. (2002). Propensity score-matching methods for nonexperimental causal studies. *Review of Economics and Statistics, 84*(1), 151-161.

Demsetz, H., & Lehn, K. (1985). The structure of corporate ownership: Causes and consequences. *Journal of Political Economy, 93*(6), 1155-1177.

Denis, D. J., & Sibilkov, V. (2009). Financial constraints, investment, and the value of cash holdings. *The Review of Financial Studies, 23*(1), 247-269.

Dickinson, V. (2011). Cash flow patterns as a proxy for firm life cycle. *The Accounting Review, 86*(6), 1969-1994.

Dittmar, A., & Mahrt-Smith, J. (2007). Corporate governance and the value of cash holdings. *Journal of Financial Economics, 83*(3), 599-634.

Durán, R. F., Lozano, M. B., & Yaman, S. (2016). Is family control relevant for corporate cash holding policy? *Journal of Business Finance & Accounting, 43*(9-10), 1325-1360.

Elshandidy, T., & Hassanein, A. (2014). Do IFRS and board of directors' independence affect accounting conservatism? *Applied Financial Economics, 24*(16), 1091-1102.

Espinoza, R., Prasad, A., & Williams, O. (2011). Regional financial integration in the GCC. *Emerging Markets Review, 12*(4), 354-370.

Eulaiwi, B., Al-Hadi, A., Taylor, G., Al-Yahyaee, K. H., & Evans, J. (2016). Multiple directorships, family ownership and the board nomination committee: International evidence from the GCC. *Emerging Markets Review, 28*, 61-88.

Eulaiwi, B., Al-Hadi, A., Hussain, S. M., & Al-Yahyaee, K. H. (2018). Investment Committee, Corporate Cash Holdings and Corporate Life Cycle. *International Review of Finance*.

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

Faccio, M., & Lang, L. H. (2002). The ultimate ownership of Western European corporations. *Journal of Financial Economics, 65*(3), 365-395.

Faccio, M., Lang, L. H., & Young, L. (2010). Pyramiding vs leverage in corporate groups: international evidence. *Journal of International Business Studies, 41*(1), 88-104.

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

Falato, A., Kadyrzhanova, D., & Lel, U. (2014). Distracted directors: Does board busyness hurt shareholder value? *Journal of Financial Economics, 113*(3), 404-426.

Faleye, O. (2004). Cash and corporate control. *The Journal of Finance, 59*(5), 2041-2060.

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

Fan, J. P. H., & 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.

Fasano, U., & Iqbal, Z. (2003). *GCC countries: from oil dependence to diversification*: International Monetary Fund.

Ferreira, M. A., & Vilela, A. S. (2004). Why do firms hold cash? Evidence from EMU countries. *European Financial Management, 10*(2), 295-319.

Ferris, S. P., Jagannathan, M., & Pritchard, A. C. (2003). Too busy to mind the business? Monitoring by directors with multiple board appointments. *The Journal of Finance, 58*(3), 1087-1111.

Fich, E. M., & Shivdasani, A. (2006). Are Busy Boards Effective Monitors? *The Journal of Finance, 61*(2), 689-724.

Field, L., Lowry, M., & Mkrtchyan, A. (2013). Are busy boards detrimental? *Journal of Financial Economics, 109*(1), 63-82.

Filatotchev, I., Toms, S., & Wright, M. (2006). The firm's strategic dynamics and corporate governance life-cycle. *International Journal of Managerial Finance, 2*, 256–279.

Filatotchev, I., & Wright, M. (2005). *The life cycle of corporate governance.* Edward Elgar Publishing.

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

Francis , B., Hasan, I., Park, J. C., & Wu, Q. (2015). Gender differences in financial reporting decision making: Evidence from accounting conservatism. *Contemporary Accounting Research, 32*(3), 1285-1318.

Francis, J., LaFond, R., Olsson, P. M., & Schipper, K. (2004). Costs of equity and earnings attributes. *The Accounting Review, 79*(4), 967-1010.

Francis, J., Philbrick, D., & Schipper, K. (1994). Shareholder litigation and corporate disclosures. *Journal of Accounting Research*, 137-164.

French, J. R., Raven, B., & Cartwright, D. (1959). The bases of social power. Classics of Organization Theory, 7, 311-320.

Gao, H., Harford, J., & Li, K. (2013). Determinants of corporate cash policy: Insights from private firms. *Journal of Financial Economics, 109*(3), 623-639.

Gedajlovic, E., & Carney, M. (2010). Markets, hierarchies, and families: Toward a transaction cost theory of the family firm. *Entrepreneurship Theory and Practice, 34*(6), 1145-1172.

Gilson, S. C. (1990). Bankruptcy, boards, banks, and blockholders: Evidence on changes in corporate ownership and control when firms default. *Journal of Financial Economics, 27*(2), 355-387.

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

Givoly, D., & Hayn, C. (2000). The changing time-series properties of earnings, cash flows and accruals: Has financial reporting become more conservative? *Journal of Accounting and Economics, 29*(3), 287-320.

Guest, P. M. (2008). The determinants of board size and composition: Evidence from the UK. *Journal of Corporate Finance, 14*(1), 51-72.

Gul, F., Tsui, J., & Dhaliwal, D. (2006). Non-audit services, auditor quality and the value relevance of earnings. *Accounting and Finance, 46*(5), 797.

Habbershon, T. G., Williams, M., & MacMillan, I. C. (2003). A unified systems perspective of family firm performance. *Journal of business venturing, 18*(4), 451-465.

Habbershon, T. G., & Williams, M. L. (1999). A resource-based framework for assessing the strategic advantages of family firms. *Family Business Review, 12*(1), 1-25.

Habib, A., Bhuiyan, M. B. U., & Hasan, M. M. (2018). Firm life cycle and advisory directors. *Australian Journal of Management, 43*(4), 575-592.

Halawi, A., & Davidson, B. (2008). Power matters: A survey of GCC boards (TNI Market Insight). Retrieved from the Hawkamah Institute for Corporate Governance website: https://hawkamah.org/uploads/reports/Powermatters.pdf.

Hamadi, M. (2010). Ownership concentration, family control and performance of firms. *European Management Review, 7*(2), 116-131.

Hamdi, B., Aloui, M., Alqahtani, F., & Tiwari, A. (2019). Relationship between the oil price volatility and sectoral stock markets in oil-exporting economies: Evidence from wavelet nonlinear denoised based quantile and Granger-causality analysis. *Energy Economics, 80*, 536-552.

Haniffa, R., & Hudaib, M. (2007). Locating audit expectations gap within a cultural context: The case of Saudi Arabia. *Journal of International Accounting, Auditing and Taxation, 16*(2), 179-206.

Hardin, W. G., Highfield, M. J., Hill, M. D., & Kelly, G. W. (2009). The determinants of REIT cash holdings. *The Journal of Real Estate Finance and Economics, 39*(1), 39-57.

Harford, J., Mansi, S. A., & Maxwell, W. F. (2008). Corporate governance and firm cash holdings in the US. *Journal of Financial Economics, 87*(3), 535-555.

Harris, M., & Raviv, A. (2008). A theory of board control and size. *The Review of Financial Studies, 21*(4), 1797-1832.

Hasan, M. M., Hossain, M., & Habib, A. (2015). Corporate life cycle and cost of equity capital. *Journal of Contemporary Accounting & Economics, 11*(1), 46-60.

Hauser, R. (2018). Busy directors and firm performance: Evidence from mergers. *Journal of Financial Economics, 128*(1), 16-37.

Hausman, J. A. (1978). Specification tests in econometrics. *Econometrica: Journal of the Econometric Society*, 1251-1271.

Hawkamah. (2010), Hawkamah brief on corporate governance codes of the GCC, annual conference, November. Muscat, Oman: Hawkamah, the Institute for Corporate Governance and OECD.

Hayton, J., Chandler, G. N., & DeTienne, D. R. (2011). Entrepreneurial opportunity identification and new firm development processes: a comparison of family and non-family new ventures. *International Journal of Entrepreneurship and Innovation Management, 13*(1), 12-31.

Hearn, B., Piesse, J., & Strange, R. (2011). The role of the stock market in the provision of Islamic development finance: Evidence from Sudan. *Emerging Markets Review, 12*(4), 338-353.

Heckman, J. J. (1979). Sample selection as a specification error. *Econometrica, 47*, 153-161.

Helfat, C. E., & Peteraf, M. A. (2003). The dynamic resource-based view: Capability lifecycles. *Strategic Management Journal, 24*(10), 997-1010.

Hermalin, B. E., & Weisbach, M. S. (1998). Endogenously chosen boards of directors and their monitoring of the CEO. *American Economic Review*, *88*, 96-118.

Hertog, S. (2007). Shaping the Saudi state: Human agency's shifting role in rentier-state formation. *International Journal of Middle East Studies, 39*(04), 539-563.

Ho, S. S., Li, A. Y., Tam, K., & Zhang, F. (2015). CEO gender, ethical leadership, and accounting conservatism. *Journal of Business Ethics, 127*(2), 351-370.

Hribar, P., & Yehuda, N. (2015). The mispricing of cash flows and accruals at different life-cycle stages. *Contemporary Accounting Research, 32*(3), 1053-1072.

Hu, Y., Wang, D., & Zhang, S. (2007). Founding family ownership, management and payout policy. *Working paper*, available at: http://www.researchgate.net/publication/228440858_Founding_family_ownership_management_and_payout_policy.

Hunton, J. E., & Rose, J. M. (2008). Can directors' self-interests influence accounting choices? *Accounting, Organizations and Society, 33*, 783-800.

Huse, M., & Zattoni, A. (2008). Trust, firm life cycle, and actual board behavior: Evidence from "one of the lads" in the board of three small firms. *International Studies of Management & Organization, 38*(3), 71-97.

Hussainey, K., & Al-Nodel, A. (2008). Corporate governance online reportingbysaudi listed companies. *Research in Accounting in Emerging Economies, 8*, 39-64.

Jaggi, B., Leung, S., & Gul, F. (2009). Family control, board independence and earnings management: Evidence based on Hong Kong firms. *Journal of Accounting and Public Policy, 28*(4), 281-300.

James, H. S. (1999). What can the family contribute to business? Examining contractual relationships. *Family Business Review, 12*(1), 61-71.

Jensen, M. C. (1986). Agency costs of free cash flow, corporate finance, and takeovers. *The AmericanEconomic Review, 76*(2), 323-329.

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

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., Davidson, W. N. I., DaDalt, P., & Ning, Y. (2009). Too busy to show up? An analysis of directors' absences. *The Quarterly Review of Economics and Finance, 49*(3), 1159-1171.

Jiraporn, P., Kim, Y. S., & Davidson, W. N. (2008). Multiple directorships and corporate diversification. *Journal of Empirical Finance, 15*(3), 418-435.

Jiraporn, P., Singh, M., & Lee, C. (2009). Ineffective corporate governance: Director busyness and board committee memberships. *Journal of Banking and Finance, 33*(5), 819-828.

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*, 193-228.

Kaczmarek, S., Kimino, S., & Pye, A. (2012). Board task-related faultlines and firm performance: A decade of evidence. *Corporate Governance: An International Review, 20*(4), 337-351.

Kalcheva, I., & Lins, K. V. (2007). International evidence on cash holdings and expected managerial agency problems. *The Review of Financial Studies, 20*(4), 1087-1112.

Karra, N., Tracey, P., & Phillips, N. (2006). Altruism and agency in the family firm: Exploring the role of family, kinship, and ethnicity. *Entrepreneurship Theory and Practice, 30*(6), 861-877.

Khan, M., & Watts, R. L. (2009). Estimation and empirical properties of a firm-year measure of accounting conservatism. *Journal of Accounting and Economics, 48*(2-3), 132-150.

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.

Kuan, T.-H., Li, C.-S., & Chu, S.-H. (2011). Cash holdings and corporate governance in family-controlled firms. *Journal of Business Research, 64*(7), 757-764.

Kuan, T.-H., Li, C.-S., & Liu, C.-C. (2012). Corporate governance and cash holdings: A quantile regression approach. *International Review of Economics & Finance, 24*, 303-314.

Kwon, Y., Newman, D., & Suh, Y. (2001). The demand for accounting conservatism for management control. *Review of Accounting Studies, 6*(1), 29-52.

Kwon , Y. K. (2005). Accounting conservatism and managerial incentives. *Management Science, 51*(11), 1626-1632.

La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *The Journal of Finance, 54*(2), 471-517.

Lafond, R., & Roychowdhury, S. (2008). Managerial ownership and accounting conservatism. *Journal of Accounting Research, 46*(1), 101-135.

Lafond, R., & Watts, R. L. (2008). The information role of conservatism. *The Accounting Review, 83*(2), 447-478.

Lamont, O. A., & Polk, C. (2002). Does diversification destroy value? Evidence from the industry shocks. *Journal of Financial Economics, 63*(1), 51-77.

Larcker, D. F., Richardson, S. A., & Tuna, I. (2007). Corporate governance, accounting outcomes, and organizational performance. *The Accounting Review, 82*(4), 963-1008.

Larcker, D. F., & Rusticus, T. O. (2010). On the use of instrumental variables in accounting research. *Journal of Accounting and Economics, 49*(3), 186-205.

Lau, D. C., & Murnighan, J. K. (1998). Demographic diversity and faultlines: The compositional dynamics of organizational groups. *Academy of Management Review, 23*(2), 325-340.

Lehn, K. M., Patro, S., & Zhao, M. (2009). Determinants of the size and composition of US corporate boards: 1935-2000. *Financial Management, 38*(4), 747-780.

Leuz, C., & Oberholzer-Gee, F. (2006). Political relationships, global financing, and corporate transparency: Evidence from Indonesia. *Journal of Financial Economics, 81*(2), 411-439.

Liu, Q., Luo, T., & Tian, G. G. (2015). Family control and corporate cash holdings: Evidence from China. *Journal of Corporate Finance, 31*, 220-245.

Liu , Y. (2011). Founding family ownership and cash holdings. *Journal of Financial Research, 34*(2), 279-294.

Lu, T., & Sapra, H. (2009). Auditor conservatism and investment efficiency. *The Accounting Review, 84*(6), 1933-1958.

Luciani, G., Aarts, P., & Nonnemann, G. (2005). Saudi Arabian business: From private sector to national bourgeoisie. *Saudi Arabia in the Balance, London and New York: Hurst*.

Lyse, D. (2017). *Saudi Arabia detentions: Living inside 'five-star prison'*. Available at: http://www.bbc.com/news/world-middle-east-42129374.

Masulis, R. W., Wang, C., & Xie, F. (2007). Corporate governance and acquirer returns. *The Journal of Finance, 62*(4), 1851-1889.

Matt, E. (2019). Saudi Arabia joins emerging market indexes, giving it access to billions of dollars. *CNN Business*. Available at: http://edition.cnn.com/2019/03/18/investing/saudi-arabia-emerging-market-ftse-russell/index.html.

Mazaheri, N. (2013). The Saudi monarchy and economic familism in an era of business environment reforms. *Business and Politics, 15*(3), 295-321.

Mehran, H., Morrison, A. D., & Shapiro, J. D. (2011). Corporate governance and banks: What have we learned from the financial crisis? In: Federal Reserve Bank of New York Staff Report 502.

Miller, D., & Friesen, P. H. (1980). Momentum and revolution in organizational adaptation. *Academy of Management Journal, 23*(4), 591-614.

Miller, D., & Friesen, P. H. (1984). A longitudinal study of the corporate life cycle. *Management Science, 30*(10), 1161-1183.

Mohammed , N. F., Ahmed, K., & Ji, X.-D. (2017). Accounting conservatism, corporate governance and political connections. *Asian Review of Accounting, 25*(2), 288-318.

Morck, R., Shleifer, A., & Vishny, R. W. (1988). Management ownership and market valuation: An empirical analysis. *Journal of Financial Economics, 20*, 293-315.

Moshashai, D., Leber, A. M., & Savage, J. D. (2018). Saudi Arabia plans for its economic future: Vision 2030, the national transformation plan and Saudi fiscal reform. *British Journal of Middle Eastern Studies*, 1-21.

Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do not have. *Journal of Financial Economics, 13*(2), 187-221.

Ntim, C. G., Lindop, S., Osei, K. A., & Thomas, D. A. (2015). Executive compensation, corporate governance and corporate performance: A simultaneous equation approach. *Managerial and Decision Economics, 36*(2), 67-96.

Opler, T., Pinkowitz, L., Stulz, R., & Williamson, R. (1999). The determinants and implications of corporate cash holdings. *Journal of Financial Economics, 52*(1), 3-46.

Ozkan, A., & Ozkan, N. (2004). Corporate cash holdings: An empirical investigation of UK companies. *Journal of Banking & Finance, 28*(9), 2103-2134.

Perrault, E., & McHugh, P. (2015). Toward a life cycle theory of board evolution: Considering firm legitimacy. *Journal of Management & Organization, 21*(5), 627-649.

Perry, T., & Peyer, U. (2005). Board seat accumulation by executives: A shareholder's perspective. *The Journal of Finance, 60*(4), 2083-2123.

Petersen, M. A. (2009). Estimating standard errors in finance panel data sets: Comparing approaches. *The Review of Financial Studies, 22*(1), 435-480.

Polsiri, P., & Jiraporn, P. (2012). Political connections, ownership structure, and financial institution failure. *Journal of Multinational Financial Management, 22*(1-2), 39-53.

Qiu, J., & Wan, C. (2015). Technology spillovers and corporate cash holdings. *Journal of Financial Economics, 115*(3), 558-573.

Quinn, R. E., & Cameron, K. (1983). Organizational life cycles and shifting criteria of effectiveness: Some preliminary evidence. *Management Science, 29*(1), 33-51.

Ramady, M. A. (2012). *The GCC economies: Stepping up to future challenges*: Springer Science & Business Media.

Randolph, R., & Memili, E. (2018). Entrenchment in publicly traded family firms: Evidence from the S&P 500. *Long Range Planning, 51*(5), 736-749 .

Richardson, S. (2006). Over-investment of free cash flow. *Review of Accounting Studies, 11*(2-3), 159-189.

Roodman, D. (2009). How to do xtabond2: An introduction to difference and system GMM in Stata. *The Stata Journal, 9*(1), 86-136.

Safieddine, A. (2009). Islamic financial institutions and corporate governance: New insights for agency theory. *Corporate Governance: An International Review, 17*(2), 142-158.

Saleh, N. M., Iskandar, T. M., & Rahmat, M. M. (2005). Earnings management and board characteristics: Evidence from Malaysia. *Jurnal Pengurusan (UKM Journal of Management), 24*.

Schipper, K. (1989). Commentary on earnings management. *Accounting Horizons, 3*(4), 91-102.

Shanthy, R. (2010). Enhancing corporate governance in listed companies with concentrated shareholdings. *Journal of Financial Crime, 17*(4), 430-440.

Shipman, J. E., Swanquist, Q. T., & Whited, R. L. (2016). Propensity score matching in accounting research. *The Accounting Review, 92*(1), 213-244.

Shivdasani, A., & Yermack, D. (1999). CEO involvement in the selection of new board members: An empirical analysis. *The Journal of Finance, 54*(5), 1829-1853.

Starr, J. A., & MacMillan, I. C. (1990). Resource cooptation via social contracting: Resource acquisition strategies for new ventures. *Strategic Management Journal*, 79-92.

Stein, J. C. (1988). Takeover threats and managerial myopia. *Journal of Political Economy, 96*(1), 61-80.

Stulz, R. (1990). Managerial discretion and optimal financing policies. *Journal of Financial Economics, 26*(1), 3-27.

Sun, Y., & Xu, W. (2012). The role of accounting conservatism in management forecast bias. *Journal of Contemporary Accounting & Economics, 8*(2), 64-77.

Tarkovska, V. (2013). *Busy boards, corporate liquidity and financial risk: Evidence from UK panel data*. Paper presented at the European Financial Management association annual conference.

The National Investor. (2008). *Power matters: A survey of GCC boards*. Hawkahah & Mudara, http://www.hawkamah.org/wp-content/uploads/2014/10/Powermatters.pdf.

Tucker, J. W. (2010). Selection bias and econometric remedies in accounting and finance research. *Journal of Accounting Literature, 29*, 31-57.

Verbeke, A., & Kano, L. (2012). The transaction cost economics theory of the family firm: Family–based human asset specificity and the bifurcation bias. *Entrepreneurship Theory and Practice, 36*(6), 1183-1205.

Villalonga, B., & Amit, R. (2006). How do family ownership, control and management affect firm value? *Journal of Financial Economics, 80*(2), 385-417.

Villalonga , B., Amit, R., Trujillo, M.-A., & Guzmán, A. (2015). Governance of family firms. *Annual Review of Financial Economics, 7*, 635-654.

Walsh, J. P., & Seward, J. K. (1990). On the efficiency of internal and external corporate control mechanisms. *Academy of Management Review, 15*(3), 421-458.

Wan-Hussin, W. N. (2009). The impact of family-firm structure and board composition on corporate transparency: Evidence based on segment disclosures in Malaysia. *The International Journal of Accounting, 44*(4), 313-333.

Wang, K. T., & Shailer, G. (2017). Family ownership and financial performance relations in emerging markets. *International Review of Economics & Finance, 51*, 82-98.

Watts, R. (2003). Conservatism in accounting part I: Explanations and implications. *Accounting Horizons, 17*(3), 207-221.

Watts , R. L., & Zimmerman, J. L. (1978). Towards a positive theory of the determination of accounting standards. *Accounting Review*, 112-134.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal, 5*(2), 171-180.

Wilson, N., Wright, M., & Scholes, L. (2013). Family business survival and the role of boards. *Entrepreneurship Theory and Practice, 37*(6), 1369-1389.

Wooldridge, J. M. (2010). *Econometric analysis of cross section and panel data*. Cambridge, MA: MIT press.

Xu, N., Yuan, Q., Jiang, X., & Chan, K. C. (2015). Founder's political connections, second generation involvement, and family firm performance: Evidence from China. *Journal of Corporate Finance, 33*, 243-259.

Yasin, H., & Shehab, I. (2004). *Monitoring and overseeing disclosure.* Paper presented at the paperpresented at the Corporate Governance in MENA Countries: Improving Transparency and Disclosure, the Second Middle East and North Africa Regional Corporate Governance Forum, Beirut.

Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics, 40*(2), 185-211.

Zhang, J. (2008). The contracting benefits of accounting conservatism to lenders and borrowers. *Journal of Accounting and Economics, 45*(1), 27-54.