

QATAR UNIVERSITY

COLLEGE OF BUSINESS AND ECONOMICS

THE EFFECTS OF BOARD CHARACTERISTICS AND OWNERSHIP STRUCTURES  
ON COMPLIANCE WITH MANDATORY IAS/IFRS DISCLOSURE REQUIREMENTS:

EVIDENCE FROM QATAR

BY

YARA B. JALLAD

A Thesis Submitted to  
the College of Business and Economics  
in Partial Fulfillment of the Requirements for the Degree of  
Master of Accounting  
January 2020

2020 Yara B. Jallad. All Rights Reserved.

## COMMITTEE PAGE

The members of the Committee approve the Thesis of  
Yara B. Jallad defended on [Defense Date].

---

Name  
Thesis/Dissertation Supervisor

---

Name  
Committee Member

---

Name  
Committee Member

---

Name  
Committee Member

---

Add Member

Approved:

---

Professor Dr. Adam Mohamed Fadlalla, Dean, College of Business and Economics

## ABSTRACT

JALLAD, YARA, B., Masters : January : [2020], Master of Accounting

Title: The Effects of Board Characteristics and Ownership Structures on Compliance with Mandatory IAS/IFRS Disclosure Requirements: Evidence from Qatar

Supervisor of Thesis: Dr. Emad A. Awadallah

Compliance with internationally accepted and renowned accounting disclosure requirements has presented itself with having utmost importance in times of increased calls for transparency. This study aims to examine the effect of selected corporate governance factors on the extent of compliance with mandatory IAS/IFRS disclosure requirements in listed non-financial entities in Qatar. Contrary to most extant studies, this thesis aims to study corporate governance factors in the light of board characteristics and ownership structures as determinants of compliance with mandatory disclosures as opposed to the commonly examined factors of firm characteristics. The sample consists of 72 annual reports belonging to 24 listed non-financial firms on the Qatar Stock Exchange over the years of 2015, 2016 and 2017. A self-constructed disclosure index consisting of 216 IAS/IFRS disclosure items was prepared to investigate the degree of compliance by the chosen listed non-financial entities. The degree of compliance was reached by exercising two different scoring methods, the dichotomous approach and the partial compliance approach, resulting in two different compliance scores of 86% and 78%, respectively. Six board characteristic variables and three ownership structure variables were chosen for this study. These were gender diversity, board size, CEO duality, presence of founding family members on the board, proportion of non-executive directors, cross directorships, institutional ownership, government ownership, and foreign ownership. After conducting multiple regression analyses with both compliance scores, the results documented are mixed. Gender diversity is found to be significantly negatively correlated with the extent of compliance with mandatory IAS/IFRS disclosure requirements under both scoring methods. Proportion of non-executive directors and foreign ownership were found to have a significant negative association with the level of compliance with disclosures under the

dichotomous approach. In the light of the partial compliance approach, CEO duality, family members and non-executive directors on board were found to be significantly positively correlated to the levels of compliance. Lastly, this study contributes to the corporate governance and disclosure compliance literature in Qatar. It further aids regulators, stakeholders, enforcement bodies and entities in realizing the possible benefits or drawbacks of certain corporate governance mechanisms on compliance with disclosure requirements.

## DEDICATION

*To my loving parents for their unconditional love, constant support, and words of encouragement that will never stop ringing in my ears.*

## ACKNOWLEDGMENTS

My greatest gratitude goes to Qatar University and the College of Business and Economics for the opportunities given to me during my studies. My deepest appreciation and thanks go out to my supervisor Dr. Emad Awadallah for his unwavering guidance, insightful suggestions, and support.

I am extremely grateful for all the support I have received from my management and colleagues over the past few months, your patience speaks volumes. I would also like to extend my gratitude to the auditors who helped in aspects of this research, I am deeply indebted to you.

To my friends who I am extremely blessed to have, your infectious positivity keeps me going. To the faculty of the College of Business and Economics who taught me throughout the course of my graduate studies, I sincerely thank you. To those whom I met during my graduate studies, thank you for making this a blissful experience.

Last but not least, a heartfelt thanks to my mother for always being a source of comfort, my father for always being a source of inspiration and my siblings for their unconditional love.

## TABLE OF CONTENTS

DEDICATION .....	v
ACKNOWLEDGMENTS .....	vi
LIST OF TABLES .....	ix
LIST OF FIGURES .....	x
Chapter 1: Introduction .....	1
1.1 Background of the Study .....	1
1.2 Statement of the Problem .....	1
1.3 Objectives of the Study and Research Questions .....	4
1.4 Motivation .....	5
1.5 Significance of the Study .....	7
Chapter 2: Literature Review .....	8
2.1 Conceptual Review .....	8
2.2 Empirical Review .....	24
Chapter 3: Theoretical Framework and Hypotheses Development .....	43
Chapter 4: Methodology .....	63
Chapter 5: Results and Analysis .....	87
Chapter 6: Conclusions .....	106
References .....	112
Appendix A: Excluded IASs/IFRSs with Exclusion Reasons .....	140

Appendix B: DCS Results for 2015.....	141
Appendix C: DCS Results for 2016.....	142
Appendix D: DCS Results for 2017.....	143
Appendix E: PCS Results for 2015.....	144
Appendix F: PCS Results for 2016.....	145
Appendix G: PCS Results for 2017 .....	146
Appendix H: P-P Plots for DCS and PCS.....	147



## LIST OF TABLES

Table 1. Breakdown by Industrial Classifications of Listed Non-financial Entities	65
Table 2. Number of Selected IASs/IFRSs and Mandatory Disclosure Items	73
Table 3. Measurement Methods Used in Previous Studies	76
Table 4. Operationalization of the Independent and Control Variables	85
Table 5. Extent of Compliance Under DCS and PCS Methods	89
Table 6. Descriptive Statistics of the Variables	90
Table 7. Pearsons Correlation	94
Table 8. Multicollinearity Statistics	95
Table 9. Numerical Results of Normality Tests	96
Table 10. Multiple Regression Results Under Both Compliance Scoring Methods	97
Table 11. Summary of Results	104

## LIST OF FIGURES

<i>Figure 1.</i> Research model .....	83
---------------------------------------	----

## **Chapter 1: Introduction**

### **1.1 Background of the Study**

An echo of financial crises, high-profile company collapses and the global consequences witnessed in the onset of the 21<sup>st</sup> century led to a hefty focus on the concept of financial disclosure transparency and the need for corporate governance. These incipient financial scandals continue to emphasize issues pertaining to corporate governance with chief attention allocated on board structures, control and accountability, as well as disclosures and transparency (Mallin, 2018). The globalization and interconnectivity of the economic world has also reached its peak which inevitably results in foreign investments and crises to be felt on a global scale. As a result of the aforementioned, entities concerned with the performance of and whom are invested in companies conveyed their relentless calls for a unified global form of financial information disclosure practices supported by the best practices of appropriate corporate governance founded on the formation of a sound board of directors and ownership structure. Hence, the International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS) were issued to serve as a guide for proper disclosures while corporate governance codes were continuously evolved, reformed, and their mechanisms monitored. This inevitably led to the topics of IAS/IFRS disclosure compliance and corporate governance to become the two utmost important topics of the century.

### **1.2 Statement of the Problem**

The fall of Enron, WorldCom, Arthur Andersen, Merrill Lynch and others highlighted the dubious managerial attitudes, lax policies, and poor financial disclosures which could be traced back to the core problem: weak corporate governance fueled by agency problems. The separation of ownership and control followed the birth of the corporate forms of business (Berle & Means, 1932). This contributed to the

unalignment of manager and investor interests; illustrated further by the agency theory by Jensen and Meckling (1976). Therefore, as a result of many fraudulent events and scandals, reporting of financials and disclosures grew to become amid the basics of a strong corporate governance system (ElGammal, El-Kassar & Messarra, 2018).

A well-designed structure of corporate governance can enhance disclosure practices, warrant the focus of management on increasing firm value, and lessen the possibility of agency costs rising between managers and investors (Shleifer and Vishny, 1997). Therefore, the contributing factors to the pipeline of scandals were eminently the extreme corporate misconducts where vital financial information and disclosures were not disseminated to their rightful shareholders; lowering their chances in making informative decisions. In due course, sound corporate governance structures are founded on the pillars of ethical boards, unbiased management, and sound ownership structures.

Ultimately, the board of directors has a vital role in corporate governance frameworks where the role it plays in the oversight and the experiences passed on to management aids in the capitalization of opportunities and in delivering reliable and timely financial information to investors (Quigley, 2009). Similarly, ownership structures also dictate the levels of foreign, government, or block holder control and the influence they exert on the extent of compliance with disclosure standards that may result from it. Should these vital pillars be given a leeway in the form of implementing and following their own standards, financial reports and disclosures made will not be in harmony or of any benefit to the international business arena; leading to crucial consequences.

The prominent diversity in accounting systems leads to noteworthy economic consequences regarding the interpretation of financial reporting internationally (Choi

& Levich, 1991; Bushman & Smith, 2001). Previous empirical and theoretical studies indicate that vested accounting standards like IFRS could be an encouragement for developing countries to increase financial reporting disclosure quality within their listed companies (Othman & Kossentini, 2015). The State of Qatar is of no exception in this case.

Qatar has rapidly developed and attracted many investments in the region by foreign investors (Mardini, 2013). However, the accounting profession and system in Qatar is considered to be in primeval stages as opposed to other neighboring countries (Al-Maliki, Hammami, & Mardini, 2015). Therefore, it could be derived that there is an eminent gap between the level of economic development and accounting system development (Al-Khater & Nasser, 2003). However, Qatar has adopted International Accounting Standards (IAS's) since 1999 and has been in line with the recognition of a single set of accounting principles approved internationally and the adoption of the IFRS.

Over the past decade, the country has ushered itself as one of the most prominent foreign investment players in the global business arena and has continuously up-surfed efforts to attract investments into the local market. Its open economy gave it the experience of exporting its products of different business areas internationally; particularly oil and gas (Mardini, 2013). Similarly, the country's financial markets have also developed since the early 2000's; globalizing Qatar's operations worldwide. Therefore, to maintain its position as a sturdy internationally recognized developing country, Qatar has adopted internationally accepted principles pertaining to corporate governance codes as well as internationally accepted accounting standards. Hence, it would be interesting to examine the level of compliance of Qatari listed companies with IAS/IFRS disclosure requirements in the light of their corporate governance

mechanisms; especially board characteristics and ownership structures. Thus, this thesis attempts to study the association between corporate governance structures (particularly board characteristics and ownership structures) and the extent of compliance with mandatory IAS/IFRS disclosure requirements in a vastly developing Middle Eastern and Gulf Cooperation Council (GCC) country exerting efforts to become a lead player in the international markets; Qatar.

### **1.3 Objectives of the Study and Research Questions**

Many studies investigated the association between disclosure and firm-specific characteristics; namely firm age, liquidity, firm size, industry, profitability, and leverage (e.g. Tower, Hancock & Taplin, 1999; Street & Bryant, 2000; Glaum & Street, 2003; Al-Shammari, Brown, & Tarca, 2008; Aljifri, Alzarouni, Ng & Tahir, 2014; Demir & Bahadir, 2014). However, Ho and Taylor (2013) acknowledge the general need for a higher number of studies to focus on the association between disclosures and corporate governance mechanisms; especially BOD characteristics. On a similar note, there were a fewer attempts to study the association between corporate governance and disclosures in emerging markets (Akhtaruddin & Haron, 2010). Likewise, corporate governance mechanisms on the company level have a significant effect on the motivation of complying with IFRS (Juhmani, 2017).

Therefore, the main objective of this study is to examine the possible effect of corporate governance structures (mainly; board characteristics and ownership structures) on the level of compliance with mandatory IFRS disclosure requirements. In a similar vein, most studies investigating compliance with disclosures use the dichotomous scoring method (Cooke's method) to determine the level of compliance. However, this study will contribute to the literature by also using the partial compliance scoring method in addition to the commonly used dichotomous approach to further examine the extent of compliance and factors affecting it under different methods of

scoring. To elaborate, the study intends to tackle the following research questions:

1. What is the level of compliance with mandatory IAS/IFRS disclosure requirements by listed non-financial firms on the Qatar Stock Exchange (QSE)?
2. Do certain board characteristics present in listed non-financial companies affect the level of compliance with mandatory IAS/IFRS disclosure requirements?
3. Do ownership structures of listed non-financial companies affect their level of compliance with mandatory IAS/IFRS disclosure requirements?

#### **1.4 Motivation**

Accounting is the language of business which permits global businesses, stakeholders and investors to adequately understand disclosed information of any company in the world. However, this could only be the case should there be a set guideline drawing on how this accounting information should be disseminated in the same quality, manner and language globally. Accordingly, the implementation of IASs/IFRSs in firms paves the way for this. The topic underlying the quality of the accounting information disclosed by listed companies to investors has been chiefly addressed in accounting and finance literature (Boonlert-U-Thai, Meek & Nabar, 2006). Similarly, IAS/IFRS compliance has gained importance in developed and developing countries with excessive research focused on the former (Alrawahi & Sarea, 2016). Yet, the presence of financial markets worldwide portrays the level of business interconnectivity and the need for a uniform method of reporting information in an internationally comparable and comprehensible manner to all concerned entities.

By this, capital is a global commodity and the matter at which emerging economies can compete for it is by strengthening their institutions and stimulating reporting standards that regulate their disclosure and accounting practices (Assenso-Okofu, Ali, & Ahmed, 2011). Therefore, there is a wide-ranging acceptance of the idea that the kind of accounting system plays a vital role in emerging stock market

development (Assenso-Okofu et al., 2011). Although implementing IAS/IFRS reporting standards that regulate the disclosures and accounting practices of a particular emerging economy is a vital step, complying with its guidelines is equally as important.

Economically, emerging markets have usually lagged behind developed economies where poor disclosures and financial conditions are a characteristic of firms in these markets (Fan, Wei, & Xu, 2010). By implementing and more importantly complying with IAS/IFRS standards, emerging economies become a step closer to becoming a setting of research interest and Qatar cannot be omitted in this regard. However, it is stated that non-compliance with IAS/IFRS is more eminent in GCC countries than developed countries which shows the presence of limited enforcement of compliance of financial reporting and their oversight (Al-Shammari et al., 2008). In that regard, Al-Maliki et al. (2015) denotes that the Qatari landscape received only a handful of interest in accounting studies. Therefore, it would be interesting to study the level of compliance with IFRS standards in Qatar. In addition to IFRS adoption, corporate governance is an important topic in emerging markets. Although research pertaining to corporate governance has extended into developing Middle Eastern countries; most focused on corporate governance and its associated practices with its effect on firm performance.

Therefore, the motivation of the study is to challenge and examine the preconceived notion and generalization of developing countries having poor disclosures. Also, the motive of this thesis is to tackle the research gap in the field of corporate governance structures and compliance with mandatory IAS/IFRS disclosures in Qatar. Furthermore, this paper opts to examine the level of compliance with disclosures by using two measurement instruments as opposed to one as in extant studies. Also, there is a motive to emphasize the ongoing efforts of corporate



governance and sound compliance with internationally renowned financial standards in a vast developing Gulf country; Qatar.

### **1.5 Significance of the Study**

Corporate governance systems have proven to be the nexus to a sound operating business environment; as denoted in the subsections above. Equally, a uniform set of accounting standards used on a global scale helps in bringing together the ease of understanding financial statements from different countries and appropriately assessing firm positions. These two fields under the accounting literature would therefore present a rather pragmatic argument on their importance and their association to one another. Additionally, since different countries have different languages, cultures, norms, laws and business practices; the implementation of corporate governance structures could also vary in different country settings.

Since this study aims to highlight Qatari listed entities in the light of local corporate governance practices in companies and their compliance with IASs/IFRSs, it would be of particular benefit to various groups of people. Firstly, this study aims to assist regulatory authorities in assessing the degree of several different board characteristics as well as ownership structures present in listed non-financial companies and the extent to which they may influence the compliance with mandatory IAS/IFRS disclosure requirements. Similarly, it sets out to be of benefit to parties involved in the protection of stakeholder interests. Furthermore, this study could be used by leaders of firms to see the impact of possessing such factors on their own levels of compliance. Thirdly, the results of this thesis could be used by auditing companies to take into consideration that compliance levels are affected by governance factors. Lastly, this thesis would benefit future research in the realm of compliance with IAS/IFRS disclosure requirements in Qatar or the region.

## **Chapter 2: Literature Review**

This chapter aims to illustrate and discuss the topic on a conceptual and empirical level to assist the overall view of the wholesome topic. The onset of this chapter will be the conceptual review which will highlight the concepts of corporate governance and its mechanisms, IAS/IFRS, and Qatar. Chapter 2 concludes with a comprehensive empirical review on previous studies associated with the topic of compliance with IAS/IFRS disclosures as well as corporate governance variables.

### **2.1 Conceptual Review**

#### *2.1.1 Corporate Governance*

A pipeline of global events have contributed to the definition of corporate governance over the years. It has received attention from various fields of research in the contexts of political science, economics, finance, accounting, philosophy, as well as law (ElGammal et al., 2018). Since the term sits in many subject areas with diverse viewpoints, corporate governance in its broadness and complexity has a wide variety of definitions.

The definition mostly used for corporate governance is “the system by which companies are directed and controlled” (Cadbury Committee, 1992). Fundamentally, corporate governance is the form at which power is implemented on corporate entities (Tricker & Tricker, 2015). This includes the formal rules, mechanisms, and regulations which the management of a company implements in effort to maximize the company’s value and minimize the agency conflict by reducing any conflicts of interests between insiders (directors, employees, and managers) and outsiders (shareholders, society, customers, among others) (Syriopoulos & Tsatsaronis, 2012). However, it is important to denote that corporate governance differs from management in the sense that it is where a governing body certifies that executive management’s responsibility of running the entity is carried out well and in the right direction (Tricker & Tricker, 2015). To be

put differently, corporate governance is also defined as the mechanisms that manifest an environment for 'self-interested controllers of a firm' (managers) to take decisions that are value maximizing for the owners (shareholders) (Denis & McConnell, 2003). In short, corporate governance regulates the bond between the firm's stakeholders and management (Gebba, 2015).

The increased interest on the importance and awareness of corporate governance has risen over the decades in order to achieve the protection of stakeholder interests while safeguarding the economic efficiency and sustainability of firms (Grant, 2003; Crowther & Güler, 2008). As a result of several financial scandals and collapses, the first corporate governance codes appeared in the 1990's in the Cadbury report of 1992 on the financial perspective and has had a significant influence on thinking globally (Tricker & Tricker, 2015). The Organization for Economic Co-operation and Development (OECD) soon followed with a proposal on the development of global corporate governance guidelines that aided countries to establish their individual corporate governance codes. These were published by the OECD under the corporate governance principles (Tricker & Tricker, 2015).

The domino effect of consequences the financial events had on the world along with the efforts set forth by large institutions and reports drafted to tackle the problem have encouraged corporate governance to grow on a global scale. Therefore, numerous countries set out to improve their corporate governance practices as a result of many corporate governance failures and the damages they had on developed and developing countries' markets (Al-Shammari & Al-Sultan, 2010; Al-Sartawi, 2015). Virtually all developed and developing economies have established corporate governance codes or legislated new company laws (Tricker & Tricker, 2015).

### *2.1.2 Benefits of Corporate Governance*

On a large scale, well-designed high quality corporate governance regulations are significant in assisting governments attain vital policy objectives pertaining to higher investment levels, improved business dynamics, and amplified productivity levels (OECD, 2018). Likewise, it warrants that companies function in an accountable and responsible manner which will inevitably augment their overall performance (Dalwai, Basiruddin, & Abdul Rasid, 2015). Consequently, the absence of effective corporate governance could lead to high profile collapses; hence, sound corporate governance practices would aid the restoration of investor trust and the prevention of such collapses of reoccurring (Mallin, 2018).

Deriving the benefits dedicated by corporate governance to the economic and business arena, it is safe to signify the advantages it commits to safeguarding the integrity of financial matters. Al-Sartawi (2017) states that the strength of the corporate governance system has a positive relationship with accounting choices that are conservative. In that essence, corporate governance would influence the level of transparency of disclosures made to stakeholders (Juhmani, 2013); which would have a positive contribution to minimizing the agency problems between principals and agents. Shaheen and Nishat (2005) link corporate governance to the performance of a firm and indicate that those characterized by poor governance are the less profitable and less valuable with lower dividend payouts to shareholders.

### *2.1.3 Corporate Governance Mechanisms*

Bhasa (2006) states that corporate governance lies within the framework of conflicts of interest (agency theory) and is thus prone to the behavioral motivation of the individuals running the firm. The mechanisms of corporate governance constitute of legal, institutional, and market settings which protect investors from the

opportunistic behavior of management and controlling attitudes of shareholders (Mollah, Al Farooque & Karim, 2012). Therefore, corporate governance includes many internal and external parties. These various internal and external entities impose the regulatory activity of corporate governance in order to protect stakeholder interests and resolve agency conflicts (Dalwai et al., 2015). Predominantly, corporate governance includes the boards' activities and its relationship with internal parties such as managers, shareholders, and members; as well as external parties such as regulators, stakeholders, and external auditors (Tricker & Tricker, 2015). Should the protection be absent, information asymmetries and monitoring difficulties suffered by the investors would increase and would further enable the misallocation and misappropriation of resources by management to take place (Mollah et al., 2012). Consequently, corporate governance mechanisms act as a means of aid for a sound corporate governance system.

It can be agreed that the dimensions of corporate governance continue to evolve while growing in complexity. However, there are certain aspects which remain in their importance (Tricker & Tricker, 2015). These aspects pertain to the mechanisms that will remain in their wholeness the pillars of a sound corporate governance system in a healthy organization. Dahawy (2009) states four contributing categories to the succession of corporate governance: ownership structure and control, financial data transparency, board of directors' structure, and audit committee management. These mechanisms represent the scope of the corporate governance structure section of this thesis and are further explained below.

#### *Ownership Structures*

The challenges pertaining to corporate governance are determined by the overall institutional and developmental environment in the country generally; and by ownership structures specifically (Tricker & Tricker, 2015). Ownership structures in

developed countries are rather dispersed whereas they are concentrated in developing countries (Ehikioya, 2009). To elaborate, emerging markets are commonly characterized by hefty government interference (Fan et.al, 2010). Governments usually intervene with business activities through imposing regulations, taxation or by even owning a fair stake in the business; referred to as state or government ownership. Shares owned by states cannot be transferred easily which in return impact policies, organizational structures of firms and managerial incentives (Alchian, 1965). Hence, this would have a big contribution to the overall corporate governance structure and level of financial disclosures published to the public as it comes in line with the needs of the ownership structure.

#### *Board of Directors Structure*

The board of directors' presence exhibits itself as a vital role in any corporate governance framework. These corporate governance codes or frameworks have a vital role in a firm in the allocation of resources and responsibilities to influence strategic decisions and generate value for the company and amongst countries (Aguilera, Florackis & Kim, 2016). The manner at which these governance codes are put into practice rests under the responsibility of the board of directors (Cadbury Committee Report, 1992). Additionally, the formulation of the organizations direction, policy and strategy lays in their jurisdiction (Tricker & Tricker, 2015). Healthy companies are characterized by having an effectual board of directors in the heart of their corporate governance structures; which plays a vital role in capital market efficiency (Alfrah, 2016). Also, the board of directors plays the roles of advisory and monitoring by defining the ideals, standards, and principles as well as ensuring their place (ElGammal et al., 2018). Campbell, Ghosh, Petrova and Sirmans (2011) imply that the board is a vital monitoring agent and especially in corporate events where interest of managers

are not in line with shareholder interests. The OECD (1999) states that the key responsibilities of the board are ensuring sufficient returns to shareholders, monitoring management performance, balancing challenging demands and preventing conflicts of interest. By having this advisory and monitoring role, it could be derived that in firms where boards are effective, management is inclined to disclose information to investors and sustaining the financial reporting quality (Hashim & Devi, 2008; Alfrah, 2016).

Entities with competent corporate governance structures are habitually characterized by having a rather balanced board of non-independent and independent directors whom contribute to the continuous success of the company by the use of their apposite knowledge and expertise and whom also possess the confidence to raise query on issues that may not be in the company's best interests. Additionally, diversity of thought throughout the board should be guaranteed by diversifying the board in the context of gender, education, experience as well as age. Furthermore, ensuring that the roles of the Chief Executive Officer and Chairman are not taken by one individual is necessary. This is because the common perception of the matter is that a sole individual retaining both roles would wield excessive power in the organization (Mallin, 2018).

#### *Disclosure (Financial Data Transparency)*

One of the eminent factors with a concrete role in corporate governance is disclosure as it facilitates transparent information to investors and is vital to the efficiency and effectiveness of capital markets (Healy & Palepu, 2001; Al-Sartwai, 2017). As emphasized by the OECD principles, financial reporting and disclosures are the key mechanisms of corporate governance to decrease information asymmetry (Leung & Ilsever, 2013). Most of the disclosures are mandatory whilst others are voluntary. Mandatory disclosures are those disclosure which are required by professional regulations, listing requirements as well as the statute (Aljifri et al., 2014).

The topic of corporate disclosures and their determinants attracted the attentiveness of researchers in the theoretical and empirical studies since the 1970's (Huafang & Jianguo, 2007). These disclosures are provided by companies through the use of different mediums such as their websites, annual reports, or by the use of quarterly financial reports which disclose aspects like managerial decisions and analysis, footnotes and filings pertaining to regulations and most importantly, in financial statements (Healy & Palepu, 2001). Thus, disclosures take a front-line position in their importance as a mechanism of corporate governance.

#### *2.1.4 Corporate Governance in Developing Countries*

Countries in the Middle East and North Africa (MENA) region have witnessed an ample progression in their corporate governance frameworks over the past decade (Amico, 2014). However, one of the eminent MENA corporate governance weaknesses which could be characterized as having the most palpable impact on investment attraction lies in the regions insufficient disclosure practices; in spite of the comparability of disclosure requirements with other emerging markets (Amico, 2014). The local corporate governance quality is extremely vital for accomplishing long-term developmental efforts in the developing world today (Oman & Blume, 2005). Those corporate governance systems within a country encompass the overall formal and informal rules, accepted private and public practices and implementation methods which regulate the relationships between corporate insiders and those who invest resources in the corporation (Hassaan, 2013a).

#### *2.1.5 International Accounting Standards (IAS) and International Financial Reporting Standards (IFRS)*

The consequences of globalization witnessed by the worlds' economy led to specific accounting problems to be emphasized. One of the concerns highlighted are



issues pertaining to the evident differences in the accounting reports in different countries (Samaha & Khlif, 2016). Thus, the pursuit for the transnational harmonization of accounting practices and standards have been accepted as advantageous and realistic (Chamisa, 2000; Samaha & Stapleton, 2009; Khlif & Souissi, 2010; Samaha & Khlif, 2016).

The International Accounting Standards Committee (IASC); later restructured as International Accounting Standards Board (IASB) was established to develop standards which signify as a single set of high quality mandatory standards that call for internationally understandable, comparable and transparent information in financial statements. In order to increase the financial statements' levels of comparability, transparency and consistency, the former IASC issued the International Accounting Standards (IASs) where in later years the IASB issued International Financial Reporting Standards (IFRS) which consider financial statements to be a tool in the delivering of information pertaining to the financial position and performance.

The globalization of the economy and financial market acts as a motivation for the implementation of IAS/IFRS in listed entities. In return, this creates consistent, comparable, and transparent accounting practices which allows investors to compare corporations worldwide as a result of the decrease in information asymmetries (Latifah, Asfadillah & Sukmana, 2012). Subsequent to the adoption of IASs/IFRSs in Europe, the consideration of changing to IFRS and the economic consequences of doing so have increased in their impetus (Judge, Li & Pinsker, 2010). Among those in debate to adopt IAS/IFRS were professionals and policy makers in developing countries whose ability to attract foreign investments has been impeded given the poor quality of financial reporting (Samaha & Khlif, 2016). Furthermore, the globalization of the international economies has aided compliance with IAS/IFRS in developing and emerging countries

characterized by economies that are market-based (Ben Othman & Kossentini, 2015). Therefore, over the past years, many developing countries have adopted the accounting standards of IFRS (Joshi & Ramadhan, 2002; Samaha & Khlif, 2016) regardless of the view that effective accounting and reporting systems are only mirrored through the context in which they function (Hopwood, 1979; Choi & Mueller, 1992; Dahawy & Samaha, 2010).

The vast adoption of IFRS comes from the benefits of complying with disclosing information to the markets as it is argued that there are significant incentives like foreign investment attraction or lowered market risks should disclosures be done in emerging economies (Ahmed & Nicholls, 1994). All in all, the adoption of IASs/IFRSs contributes to more condensed accounting choices and an upsurge in disclosures which increases investor protection and reduces private benefits of the insiders in a company. Mere adoption of IAS/IFRS may not contribute to the intended results should there be a lack of full compliance with the financial reporting standards (Bova & Pereira, 2012) or with standards disclosure requirements (Juhmani, 2017). Therefore, compliance with these standards is necessary to safeguard the quality of financial reports and their usefulness to the stakeholders of the organization who call for increased accountability (Benjamin, 2008).

#### *2.1.6 Qatar*

Qatar is one of the vastly growing developing countries worldwide with a stock exchange determined to be an exchange leader in the GCC (Qatar Exchange, 2017). The country's stable macroeconomic environment was driven by low government debt and budget surplus as a result of energy exports revenue (GCI, 2016). In a similar vein, it withheld its position as the second-most competitive economy amongst the Arab nations in the years of 2017-2018 (World Economic Forum, 2018). Based on data from

Qatar's Planning and Statistics Authority (2018), Qatar's real GDP growth rate over the years in the study sample were 3.6%, 2.2%, and 1.6% for 2015, 2016, 2017, respectively. 'Qatar Economic Update' by The World Bank states that growth in the nation showed its weakest figure in over two decades of 1.6% in the year of 2017 as a result of the diplomatic rift with neighboring GCC countries. It further attested that redirection of trade, introduction of the new port, and infrastructure spending associated with the FIFA World Cup 2022 helped the economy recover. Therefore, impacts of the ongoing rift are considered short-lived as the economy is expected to grow (The World Bank, 2019).

In order to properly and fairly reflect the economic environment of the country, this thesis finds it important to reflect the situation prior to and after the embargo situation Qatar witnessed in the middle of 2017. Qatar's rank in the Global Competitive Index (GCI) portrayed the countries advancing performance and keen position in economic growth as well as its overall competitive stance over the years identified in this thesis (2015, 2016, and 2017). The GCI is an annually published report by the World Economic Forum which notes the performance of countries on a number of pillars of competitiveness. These include but are not limited to infrastructure, health and primary education, institutions, developed financial markets and others. Qatar was in the lead of the MENA region as it ranked first amongst them in the GCI for the periods of 2014-2015 and 2015-2016. Its rank fell to second in 2016 – 2017, and to third in the MENA in 2017-2018. In terms of its worldwide position, the country held a considerably steady position in the years between 2012 to 2016 and slightly curtailed in its ranking in the subsequent years. The change in the drop in its ranking down to the 25<sup>th</sup> place in 2018 from the preceding years' ranking of 18 was initially a result of the fall in oil and gas prices that influenced Qatar's situation in fiscal aspects (World

Economic Forum, 2018).

According to the World Bank (2019), Qatar's economy is expected to maintain its positive stance with an anticipation of a 3.4% growth by the year of 2021 with the approach of the FIFA World Cup. Moreover, the world bank states that the high infrastructure spending to diversify the economy and the projects related to the Qatar National Vision 2030 will counterbalance any fall in investment spending exerted on the FIFA projects.

Corporate governance disclosure is believed to be extremely vital for countries who aspire to attract investors from the international setting and spread foreign investment (Shehata, 2017). On that note, Qatari efforts to attract foreign investments are eminent as a result of its openness to allow for them. The year of 2010 witnessed the expansion of foreign investor roles under Investment Law No. 1 which permitted the possibility of complete foreign ownership of business activities (Mardini, Tahat & Power, 2018). The efforts exerted by the country into attracting foreign investment into the country cannot go unnoticed. In 2019, Qatar implemented the International Monetary Funds Enhanced General Data Dissemination System (e-GDDS) in its launch of the National Summary Data Page which opts to improve data transparency and form a synergy among surveillance and dissemination. Therefore, this will give stakeholders that are both national and international as well as policy makers the ease of accessing this information (IMF, 2019).

One of Qatar's most recent efforts to improve investor trust as well as further attract local and foreign investment in listed entities is by the issuance of the QSE mandatory investor relations requirements enforced on the onset of October 2019. The new investor relation rules came as a result of feedback from international and local investors whom implied that listed entities on the QSE are not committing sufficiently

in that area, in return affecting the trust in the market. Therefore, intensifying the need to comply with reporting standards.

As a result of the heightened efforts to attract investors, applying amplified corporate governance practices and complying with international accounting standards is of utmost importance; signifying the importance of this thesis topic to the country setting of Qatar. Therefore, it would be interesting to study a vastly developing country's efforts in complying with internationally renowned, followed and accepted accounting standards. Furthermore, given the diplomatic unrest the region, it would be enlightening to see how vigilantly these mandatory reporting standards have been followed before and during an unexpected time of unease in the state of Qatar.

#### *2.1.7 Corporate Governance in Qatar*

Corporate governance mechanisms listed entities in Qatar are expected to follow are underlined in the 'Governance Code for Companies & Legal Entities Listed on the Main Market' ('the Code') document issued by the Qatar Financial Markets Authority (QFMA) (QFMA, 2016). The Governance Code denotes that one of the vital management and control systems for companies, shareholding companies and especially legally listed entities in financial markets, is the concept of 'governance'. The Qatari governance code describes governance as the factor that promotes transparency and disclosure, regulates stakeholder rights, promotes equality amongst stakeholders, and encourages the advancement and development of the society. It also denotes that governance may lead to the improvement of company performance and upholds the interests of the company's stakeholders firstly, followed by those of the public and the company.

The relevance of the code trickles through the fact that it is based on best international codes of governance principles such as the ones developed by the OECD

in 2015, G20, The Bank for International Settlements (BIS) in 2015, the International Corporate Governance Network (ICGN) in 2014; and lastly, by regional codes under the unified guiding principles for corporate governance for companies listed in the GCC in 2012. This highlights the Qatari efforts to develop and internationalize its systems of governance in line with international best practices; which may lead to an increase in foreign investments and investor trust.

#### *2.1.8 Accounting and Financial Reporting Setting in Qatar*

As it is true that Qatar's economy has grown, the accounting systems in the country changed but at a different pace (Al-Shammari et al., 2008). Some studies contend that accounting and reporting systems will be effective once they mirror the setting in which they function (Rahman, 2005). In a similar vein, the level of a firm's compliance with the regulatory requirements as well as legal ones relies on how strict the government, regulatory or professional organization (Marston & Shivers, 1991; Aljifri et al., 2014). Therefore, the first part of this subsection will highlight the legal framework under which the accounting systems function.

A firm's financial reporting quality is largely influenced by the financial reporting regulations of the country to which the firm belongs to (Haniffa & Cooke, 2002). Therefore, the extent of compliance with mandatory disclosures are undoubtedly affected by the regulatory mechanisms in the country (Boshnak, 2017). By that, the IASB does not have enforcement powers in any country and will thus rely on the local regulatory authorities to do so (Alali & Cao, 2010). The importance of compliance with financial reporting and disclosures in the state of Qatar radiates through the several laws which propagate their need. Brown (2011) denotes that the recognition of the benefits of IAS/IFRS adoption rely on external factors such as regulatory and legal support as

well as monitoring compliance levels. These aspects are clear in the Qatari environment.

The legal framework pertaining to financial reporting in the country is founded on a number of company laws and listing requirements which have been provisioned over the past few decades (Hossain & Hammami, 2009; Al-Mannai & Hindi, 2015, Mardini & Tahat, 2017). The first company law was issued in 1981 by the Ministry of Economy and Commerce (MEC) known as Company Law No. 11 of 1981 which instructed businesses with local operations to prepare an income statement and statement of financial position on an annual basis but did not clarify the contents of the financial statements or matters relating to which accounting standards they should follow (Mardini et al., 2018).

The Qatari jurisdiction has publicly committed towards realizing IFRS as the single set of high quality global accounting standards which has been highlighted through several notions. The adoption of IASs in Qatar started in 1999 under the encouragement of the Central Bank of Qatar (CBQ) following the adoption of Doha Securities Market Law No. 1 of 1995; the securities law (Mardini, 2013). However, Company Law No. 5 of 2002 is considered the fundamental law supporting company financial disclosures (Mardini et al., 2018). This law, as opposed to Company Law No. 11, clearly states the need for companies to hold documents, records, and accounts ‘in accordance with the accounting principles approved internationally’. These accounting principles have been defined as the IFRS standards under the regulations emphasized by the Qatar Financial Markets Authority (QFMA, 2016). Therefore, Company Law No. 5 dictated the necessity of listed entities to comply with IFRS in relation to the contents of their annual reports and financial reports; emphasizing the requirement of

companies to present their investors with relevant, detailed and timely financial information (Mardini et al., 2018).

In addition to a few laws on the use of IFRS, the conformity with the standards has been further highlighted by several QFMA rulebooks, particularly; the QFMA Offering and Listing Rulebook of Securities and the QFMA Offering and Listing Rulebook of Securities “Second Market”. QFMA is the authority in Qatar which has the legal right to exercise its full power under Law No. 33 of 2005 as well as the rules and regulations it issues in order to achieve its regulatory objectives in line with international standards to establish a leading financial market in the country and to foster the understanding of the financial market amongst investors and other concerned individuals (QFMA, 2008 Regulations Board decision No. 1 of 2008, Article 2).

The importance of complying with disclosures by listed entities in Qatar is also highlighted in Law No. 8 of 2012 of QFMA. The law highlights the responsibility of its board for setting and overseeing the conditions and procedures in the context of offering securities to the public on the market where they contain accurate, sufficient and comprehensive disclosed information that may be of interest to investors (Item 4 of Article 30, Law No.8 of 2012).

#### *Qatari Stock Exchange*

The Doha Securities Market was established in the year of 1997 as a result of the introduction of the Doha Securities Market Law No. 14 of 1995 by the MEC (Mardini et al., 2018). The QSE was established in the state of Qatar in 1995 and is regulated by the Qatar Financial Markets Authority (QFMA) (QE, 2017). The exchange listing requirements require companies to have reports prepared in the light of the IFRS and International Accounting Standards (IAS) (QE, 2017). Furthermore, listed companies are regulated by QFMA under law No. 8 of 2012 in which the authority can



set the requirements for financial statement preparation in line with IFRS; mentioned previously.

The Qatar Stock Exchange highlighted that one of the requirements for the admission of securities to trading is that the issuer of the securities must have consolidated published or filed audited annual financial statements in line with IFRS. Additionally, in terms of disclosures, the QSE underlines the disclosure obligations of which the issuer of securities on the stock exchange must adhere to. When an entity applies for admissions to trade on the exchange, it is expected to comply with the obligations under applicable Qatari laws (Law. No. 5 ) in the light of ‘initial, ongoing or ad hoc disclosure obligations’. The first addressed item was that the issuer should ensure not to disclose any misleading or confidential information (QSE, 2015).

Other rules, regulations and provisions assigned by the QSE on the subject of the board of directors and their duties, board compositions, voting rights and others are listed in the “Governance Code for Companies & Legal Entities Listed on the Main Market” or the ‘governance code’ book by the QFMA in line with Decision No. (5) of 2016 (QE, 2017; QFMA, 2017). This code obeys the basis of ‘comply or explain’ which is applicable to all listed entities (Shehata, 2015). Furthermore, the QSE follows Law No. 11 of 2015 ‘Promulgating the Commercial Companies Law’ and provides guidance on ESG reporting. These rules will be discussed in further detail in the following sections.

The Qatari stock exchange has 46 listed companies as of the year of 2019 which are distributed amongst seven sectors which are: Banking & Financial Services, Consumer Goods & Services, Industrials, Insurance, Real Estate, Telecoms and Transportation; in that order. All listed companies in the QSE should have a minimum capital of 40 million Qatari Riyals subscribed and are expected to abide by the rules

and regulations set by the QSE as per the ‘Listing Requirements for Equity Securities Guide’ of 2011.

This subsection underlined the legal and economic landscape of the State of Qatar to put into perspective the importance of adopting and complying with disclosure requirements asserted by international accounting standards in a vast developing country proving its presence in the international business environment. The efforts set to attract foreign investments, invest in foreign countries, develop financial markets, and propel economically also convey the hidden operational efforts to further advance the sphere of accounting and reporting that support these efforts. This subsection conveyed the long existent and ongoing efforts by the law and regulatory entities on the compliance with proper financial reporting and disclosure practices, recognition of the IFRS as the single set of international accounting standards to follow, and the importance of appropriate corporate governance practices in the country. All in all, this section acts as a backbone of persuasion to the purpose of studying this topic as it is rather interesting to bring an extremely vast economically developing gulf country to the grounds of accounting studies by examining selected factors that determine the level of compliance with international accounting standards disclosure requirements; to further note the extent of development in accounting in the country.

## **2.2 Empirical Review**

This section of the literature review chapter sets to highlight and examine all previous studies conducted on the topic of mandatory compliance with IAS/IFRS disclosure requirements in developed as well as developing countries. It will also shed a light on all previous studies that are of relevance to the topic at hand under the umbrellas of either disclosure compliance (under IAS/IFRS or local accounting standards disclosure requirements), corporate governance factors, or IAS/IFRS related studies in developing countries in general, and Qatar in particular. By this, this section

will highlight the gap in literature amongst those studies conducted in Qatar and will also highlight those weaknesses in studies done in developing countries to better augment the objectives and motives of this thesis.

### *2.2.1 Studies in Developed Countries*

Research conducted on the grounds of company compliance with financial disclosures requirements that took place in developed western countries include ones in the USA (Nobes, 1990; Street & Bryant, 2000; Street & Gray, 2002), Germany (Glaum & Street, 2003), New Zealand (Yeoh, 2005), Australia (Taylor, Tower, Van Der Zahn & Neilson, 2008); Hungary (Fekete et al., 2008), UK (Watson, Shrivies & Marston, 2002; Iatridis, 2008) Greece (Galani, Alexandridis, & Stavropoulos, 2011; Tsalavoutas, André, & Evans, 2012) and Spain (Wallace, Naser, & Mora, 1994).

Most, if not all, of the aforementioned studies focused on firm characteristics and their association to the extent of compliance with disclosure requirements or compliance with mandatory disclosure requirements in general. Firm characteristics usually addressed in studies examining compliance with mandatory disclosures include firm size, firm age, profitability, liquidity, industry type and other firm related characteristics. For instance, Street and Bryant (2000) investigated the association between certain factors such as listing status, profitability and industry type and IAS disclosures in US listed entities. Similarly, Street and Gray (2002) also studied various firm characteristics (profitability, size, auditor and industry type, and listing status) and compliance with IAS in US listed firms. In Greece (Galani et al., 2011) found that only size of a firm is associated with the level of compliance with disclosures in 2009 for 43 listed Greek companies. Likewise, in Hungary, Fekete et al. (2008) studied the extent of compliance with mandatory IFRS and the firm characteristics factors that influence this compliance. However, this thesis opts to study corporate governance factors such

as board characteristics and ownership structures on the extent of disclosure compliance, as opposed to several studies in developed countries examined compliance with mandatory disclosures in general and with some ownership and board structure variables.

Malone, Fries, and Jones (1993) examined the extent of financial disclosures in 125 firms of the oil and gas industry in the US. Their study focused on several firm characteristics such as profitability, total assets, audit firm size, and listing status on the extent of financial disclosures. Additionally, the authors examined ownership structure in the light of number of shareholders and its association to the extent of financial disclosures. Their results read that entities with higher debt/equity, higher number of shareholders, and listing in major stock exchanges are associated with higher financial disclosures; whilst other variables are not supported.

Glaum and Street (2003) set out to examine the factors affecting IAS disclosure requirements. They found that ownership diffusion has no association to the level of compliance with mandatory IAS disclosures. Yeoh (2005) examined the compliance with the 495 mandated items in listing rules, Financial Reporting Standards (FRSs) and Statements of Standard Accounting Practices (SSAPs) of 39 listed non-financial entities on the New Zealand Stock Exchange for the period ranging from 1996 to 1998. The author documents that the overall compliance is higher with SSAP than FRSs and listing rules. Crowley (2011) examined the compliance levels with mandatory IFRS disclosures in 75 companies from EU15 countries for the year of 2009. With a disclosure checklist of a total of 42 IFRS disclosures, the author finds that there is no significant influence of foreign ownership on the compliance with IFRS disclosures.

### *2.2.2 Studies in Developing Countries*

There is a mix of literature in the context of mandatory disclosure compliance

in several aspects in developing country settings. The variation in the literature presents itself in the disclosure requirements addressed in the studies such as those mandatory items dictated by IAS/IFRS requirements, local accounting practices, or others in line with disclosure requirements determined by best practices. Additionally, the variation amongst the studies exists in the determinants of disclosure compliance studied where a hefty amount of attention has been poured onto corporate characteristics (firm age and size, industry, profitability, liquidity and auditor type) rather than any other determinants such as cultural factors or the determinants set to be studied in this thesis particularly; board characteristics and ownership structures.

Several studies were conducted on firms in developing countries on the topic of mandatory IAS/IFRS disclosure compliance over the past decade; with the exception of Wallace and Naser (1995), Samaha and Stapleton (2009), Rahman, Ismail & Hussin (2011) and Holtz and Neto (2014), whose studies were based on mandatory compliance with local or best practice accounting standards. Studies on mandatory IAS/IFRS disclosure compliance were based in countries of the GCC such as: Kuwait (Al Mutawaa & Hewaidy, 2010; Alanezi & Albuloushi, 2011; Alfraih, 2016), United Arab Emirates (Aljifri et al., 2014), Bahrain (Sarea & Dalal, 2015; Alrawahi & Sarea, 2016; Al-Sartawi, Alrawahi & Sanad, 2016; Juhmani, 2017); Qatar (Tahat, Mardini & Haddad, 2018), GCC countries (Al-Shammari et al., 2008); other countries in the MENA region: Jordan (Naser et al, 2002; Al-Shiab, 2003; Al-Akra et al., 2010; Hassaan, 2013a; Mardini, Tahat & Power, 2013; Mardini & Power, 2015; Tahat, Mardini & Power, 2017), Egypt (Abd-Elsalam & Weetman, 2003; Samaha & Stapleton, 2009; Hassaan, 2013b; Shehata, Dahawy, & Ismail, 2014; Ebrahim & Fattah, 2015). Likewise, studies in Asia: Bangladesh (Ahmed & Karim, 2005), China (Peng, Tondkar, van der Laan Smith & Harless, 2008) Hong Kong (Wallace & Naser, 1995), Malaysia

(Abdullah, Evans, Fraser, & Tsalavoutas, 2015; Abdul Rahman & Hamdan, 2019), Indonesia (Krismiaji and Surifah, 2019) and Africa, particularly: Zimbabwe (Owusu-Ansah, 1998) Ghana (Agyei-Mensah, 2013; Yiadom & Atsunyo, 2014; Appiah, Awunyo-Vitor, Mireku & Ahiagbah, 2016; Agyei-Mensah, 2017) Kenya (Bova & Pereira, 2012); and Uganda (Nalukenge, Nkundabanyanga & Ntayi, 2018). Also, Turkey (Demir & Bahadir, 2014), Brazil (Santos, Ponte, & Mapurunga, 2013) and group or cross country studies (Tower et al., 1999; Craig & Diga, 1998).

However, as the aforementioned, a majority of the above mentioned studies examined the compliance with mandatory IAS/IFRS disclosure requirements or with other mandatory local accounting practices under the realm of firm characteristics as determinants of compliance with disclosures. On the other hand, only a handful of the above mentioned studies associated other factors as determinants of mandatory disclosure compliance (IAS/IFRS or local accounting standards disclosure requirements) which included elements of corporate governance factors such as board characteristics and ownership structures.

Studies which examined the relationship between corporate governance variables and IAS/IFRS disclosure requirements are by Naser et al. (2002), AlShammari et al. (2008); Hassaan (2013a); Hassaan (2013b); Al-Akra et al. (2010), Alanezi and Albuloushi (2011), Aljifri et al. (2014), Abdullah et al. (2015) ; Ebrahim and Fattah (2015), Alfraih (2016); Juhmani (2016); Fernandes (2017); Agyei-Mensah (2017); Al-Sartawi et al. (2017); Nalukenge (2018). Other studies which are considered of relevancy to the topic of corporate governance mechanisms as factors of the level of compliance with required disclosures were done so under local accounting standards. Those studies were in Hong Kong (Wallace & Naser, 1995), Malaysia (Rahman, Ismail & Hussin, 2011) Zimbabwe (Owusu-Ansah, 1998) and Brazil (Holtz & Neto, 2014)

and cross country studies (Craig & Diga, 1998). These studies will be further highlighted in a forthcoming section.

Al-Shammari et al. (2008) conducted a GCC wide study between the years of 1996 and 2002 on 137 listed GCC entities to find the extent of compliance with mandatory IAS disclosures. The authors also examined the factors which influence the extent of compliance with several firm characteristics as well as one significant corporate governance factor examined in this thesis: ownership diffusion. The results of their study revealed that institutional ownership has no significant impact on the compliance with IAS disclosures. Although this study shed a light on the country setting of Qatar, it did not examine corporate governance mechanisms that the current thesis opts to, except for one variable of ownership diffusion, per se.

Al-Akra et al. (2010) examined the influence of corporate governance variables (namely; ownership structures, non-executive directors, board size, and audit committee) on compliance with mandatory IFRS disclosures in 80 listed Jordanian companies between 1996 and 2004. The authors report that the size of the board and presence of an audit committee were significant determinants of compliance with mandatory IFRS disclosures. However, they found that ownership structures and number of non-executive directors are insignificant in effecting disclosures.

Alanezi & Albuloushi (2011) conducted a study in Kuwait in the field of IFRS-required disclosure. Their study included various independent variables associated with firm characteristics, ownership diffusion as well as other governance mechanisms. They conclude that the presence of a voluntary audit committee is significantly and positively related to the level of IFRS required disclosures. They also find no significant relationship between firm size, age, and profitability on IFRS required disclosures.

Hassaan (2013a) conducted an investigation to find the impact of the structures

of corporate governance on the extent of compliance with mandatory IFRS disclosure requirements on entities listed in Jordan. The author constructed a disclosure index consisting of mandatory disclosure requirements in the year of 2007 to measure the compliance levels of firms. The corporate governance structures studied in the paper are board characteristics (independence, size, and leadership) as well as the ownership structure (ratios of: management, government, private and public ownerships). The authors results claimed a lack of impact of those corporate governance's structures on compliance with mandatory IFRS disclosure requirements.

In a similar context, Hassaan (2013b) also investigated the effect of the introduction of the 2005 corporate governance code on the compliance with mandatory IFRS disclosure requirements in listed companies in Egypt. Basing the study on the same year of 2007, the author formed a disclosure index of the IFRS disclosure requirements of that year to measure the compliance levels. As in the case of Jordan, the author found a lack of influence of the corporate governance structures on the compliance level with mandatory IFRS disclosure requirements.

Aljifri et al. (2014) investigated the relationship between certain characteristics and mandatory corporate financial disclosures (relating to both IAS/IFRS and local disclosure requirements) in 153 listed and unlisted public joint stock firms in the UAE. Although this study included a hefty number of firm specific variables as determinants of compliance (industry type, ROE, liquidity, listing status and capitalization), it also included corporate governance factors such as foreign ownership, audit committee presence and non-executive directors. The results of this study found firm specific characteristics (namely: industry type, listing status, and firm size) have a significant association with level of compliance with mandatory disclosure. All three factors were found to have no association with the compliance with mandatory IFRS/local disclosure



items.

Abdullah et al. (2015) examined the levels of mandatory IFRS disclosures and the effects of family control on them on a sample of 221 Malaysian companies for the year of 2008. Similar to the measurement approaches used in this thesis, Abdullah et al. (2015) used both scoring methods: dichotomous scoring (Cooke's method) and partial compliance to examine the level of compliance with mandatory disclosure of 259 index items. They depict that family control is negatively related to the extent of disclosure. This study is one of the very few that examine the level of mandatory IAS/IFRS disclosure in the light of two scoring methods which this thesis aims to accomplish. However, it did not highlight more of the corporate governance mechanisms set to be examined in this thesis such as board diversity, multiple directorships and ownership structures.

Ebrahim & Fattah (2015) conducted a study on 116 listed Egyptian companies in 2007 where they examined factors of corporate governance and audit quality as the determinants of compliance with IFRS income tax disclosure requirements, namely IAS 12 and Egyptian Accounting Standard 24 (EAS 24). By using a regression analysis, the authors found that entities with higher foreign board members and institutional ownership have an effect on complying with disclosure requirements.

Alfraih (2016) investigated the association between board of directors' characteristics and compliance with mandatory disclosures in the light of IFRS requirements in listed companies in Kuwait for the year of 2010. The extent of compliance with mandatory disclosures was measured by an item-based index. Furthermore, the author chose to study the characteristics of CEO duality, gender diversity, multiple directorships, family members, presence of members of the Kuwait ruling family and the number of members on the board. A regression model was used

to test the hypotheses where it was found that gender diversity, multiple directorships, and board size are positively associated with the extent of compliance; and all other variables were negatively associated with compliance.

Al-Sartawi et al. (2016) conducted a study in Bahrain to investigate the relationship between the characteristics of the board and the compliance level with mandatory disclosure requirements under IAS 1 by listed firms in Bahrain. The authors approached the investigation by using a disclosure index for the measurement of the compliance level with IAS 1 and a multiple linear regression model to measure the degree of the relationship of the characteristics with the mandatory disclosure requirements. The results of their study indicate a significant negative association between board size, stockholder ownerships, and CEO non-duality with compliance with IAS 1 disclosures.

Juhmani (2017) examined the association between corporate governance and IFRS disclosure a year prior to the first Bahraini corporate governance code was published. The author used eight corporate governance mechanisms as independent variables; board independence, audit committee independence, CEO duality, audit committee size, board size, managerial ownership, government ownership and blockholder ownership. The findings portray the existence of a relationship between the first three mechanisms board independence, CEO duality and audit committee independence with IFRS disclosures. Thus, indicating that the latter five mechanisms have no association with the level of IFRS disclosures.

Agyei-Mensah (2017) conducted an investigation to find the compliance level with disclosure requirements pertaining to risk under IFRS 7 by firms listed in Ghana over a period of three years. The author hypothesizes the negative association of board size, independent directors, blockholder ownership, institutional ownership, and audit

committee independence, with the extent and quality of risk disclosure compliance. The results of the study document a significant positive association between the proportion of non-executive directors and IFRS 7 disclosures. Similarly, board size was found to have a significant positive correlation with the compliance with risk disclosure quality.

An extant study with a high level of similarity to this thesis is the dissertation by Boshnak (2017) in which the author comprehensively investigated the extent of mandatory and voluntary disclosures and factors which influence them in the GCC through the years of 2010 to 2013. The factors studied in the research included firm characteristics, ownership factors, board characteristics and cultural aspects. In harmony with other studies, the author self-constructed a disclosure indices with all required disclosure items; mandatory and voluntary. After running a regression analysis, the author depicts that the levels of disclosures across the GCC vary. The results also show that factors such international listing, size of the firm, age, state ownership, board independence and the level of director and financial controller education positively affect the levels of mandatory disclosures. The author also states that eminent differences were present across different countries and through the sample period. Although this study did in fact cover the country setting of Qatar and shed a light on the topic of the current thesis, it differs on several grounds. The current thesis provides a focused and in depth view on Qatar with a larger sample size chosen for it as opposed to focusing on the whole GCC and giving minor attention to Qatar with a total of 44 listed entities across four years in the study of Boshnak (2017). Additionally, the study deployed by Boshnak (2017) focused on the four years ranging between 2010-2013, whereas this thesis will focus on more recent years' findings, specifically the years of 2015, 2016, 2017, to capture the essence of compliance efforts set forth in the country that is working on vastly developing and attracting investments. Moreover, this

thesis paper will employ two measurements of compliance rather than one as used by Boshnak (2017).

Nalukenge et al. (2018) conducted a research on microfinance institutions in Uganda to find the relationship between corporate governance, ethical culture, internal controls over financial reporting and the compliance with IFRS. To measure corporate governance, the authors used board financial expertise, board independence, and board role performance. By conducting surveys, they found that corporate governance as well as the other two studied factors have contributed significantly to compliance with IFRS.

In a more recent study conducted in Indonesia, Krismiaji and Surifah (2019) examined the effects of different corporate governance on the levels of compliance with disclosures of IFRSs in 2013 and 2014. The authors used several proxies for corporate governance such as board structure, ownership structure and audit committee characteristics. They find that the independence and size of the board, the size and independence of the audit committee and ownership by management positively impact the level of compliance with IFRS disclosures.

In Brazil, Fernandes (2017) investigated board characteristics in the sense of internationality on the board and the level of compliance with IFRS 3 disclosure requirements. The author finalizes that foreign board members and training abroad contribute to higher compliance with mandatory IFRS 3 disclosure requirements.

On a similar premise, some studies investigated the relationship between corporate governance mechanisms such as board characteristics, ownership structures and compliance with local accounting standards. For instance, Wallace and Naser (1995) examined the level of compliance with mandatory disclosures by Honk Kong Statements of Standard Accounting Practices (HK SSAP) in Hong Kong. Although most of their variables are related to firm characteristics, they did also study the effect

of having shares held by outsiders in which they found no impact of the variable on mandatory disclosures.

Owusu-Ansah (1998) conducted a study on 49 listed companies in Zimbabwe for the year of 1994 to find the impact of several corporate variables on the extent of compliance with mandatory disclosures under listing rules, Companies Act, as well as IASs. The results of the study depict that the size and age of the company, ownership structure, and profitability have a positive significant impact on mandatory disclosure practices.

In the same vein, Rahman et al. (2011) studied the factors which affect the degree of compliance with disclosure requirements of the Malaysian Accounting Standards Board (MASB) in 170 listed companies on the Kuala Lumpur Stock Exchange in 2004. By employing ordinary least square regression model, their results indicate that only the firm characteristic of leverage has a positive association with the level of compliance. Corporate governance factors such as board independence, CEO duality, audit committee independence, block-holder ownership have no significant association with compliance.

Most of the studies which set out to examine the influence of corporate governance factors (namely: board characteristics and ownership structures) in developing countries; did so in relation to voluntary disclosures rather than mandatory disclosures. These studies were done in China (Huafang & Jiango, 2007); Bahrain (Juhmani, 2013); Jordan (Alhazaimah, Palaniappan & Almsafir, 2013; Sartawi, Hindawi, Bsoul & Ali, 2014; Haddad, AlShattarat, AbuGhazaleh & Nobanee, 2015; Albawwat & Basah, 2015); Egypt (Soliman, Ragab & Eldin, 2014); Turkey (Karagül & Yönet, 2012); Kuwait (Al-Shammari & Al-Sultan, 2010); Malaysia (Haniffa & Cooke, 2002; Ghazali & Weetman, 2006). Hence, it could be deduced that most of the

studies using corporate governance and ownership structures as determinants are usually more or less on the side of voluntary disclosures rather than mandatory. This could be justified as voluntary disclosures are not an obligation entities need to comply with, and hence would depend, on a large extent, on the boards' willingness to disclose extra information to the public. Along the same line, most researchers studied corporate governance mechanisms (board characteristics and ownership structures) and their link to firm performance (e.g: Connelly & Limpaphayom, 2004; O'connell & Cramer, 2010; Mollah et al., 2012; Shukeri, Shin & Shaari, 2012; Gaur, Bathula & Singh, 2015; Johl, Kaur & Cooper, 2015).

Based on the above, the corporate governance factors chosen for this thesis were previously mostly associated with studies on voluntary disclosures in developing countries; adding uniqueness to the thesis topic at hand which investigates board characteristics and ownership structures in the light of mandatory IFRS disclosures.

### *2.2.3 Studies in Qatar*

This subsection of the empirical review will highlight all relevant studies that were based in Qatar under multiple topics in the fields of IAS/IFRS, reporting, compliance, and corporate governance. This is done in order to highlight the results of the past studies in the country and most importantly to highlight the evident gap this thesis opts to fill.

The Qatari landscape received only a handful of interest in accounting studies (Al-Maliki et al., 2015). However, it is worthwhile to mention studies that were done in the Qatari field. Firstly, there are various extant research on corporate governance practices in the state of Qatar which address several different fields in the subject matter (Hossain & Hammami, 2009; Sharar, 2011; Almudehki & Zeitun, 2012; Awadallah, n.d.). Similarly, there is a considerable amount of research under the topic of disclosure

practices, reporting mechanisms, and adoption of IFRS in Qatar. However, none of the extant studies shed a light on corporate governance mechanisms as indicators to the level of compliance with mandatory IFRS disclosure requirements, making this thesis the first to address the topic.

Hossain & Hammami (2009) empirically investigated the relationship between firm characteristics and voluntary disclosures in Qatar. Their sample included annual reports of 25 listed entities in the Doha Securities Market in 2007. By developing a disclosure checklist and statistically analyzing the results by multiple regression analysis, they found that size, age, assets in place and complexity are significant in explaining the levels of voluntary disclosure.

Along the same lines, Al-Moghawli (2009) empirically investigated the extent of internet financial reporting (IFR) practices in listed entities in Qatar and the factors which affect these practices for the year of 2008. The study documents a significant relationship between profitability, company size, and ownership structure and the level of IFR. The author uses director and individual investor ownership to test the ownership structure impact on IFR in Qatar. Although this paper is of some relevance to this thesis, it does not examine the impact of these characteristics on compliance with mandatory accounting disclosures which this study will shed a light on. Also, this paper took into consideration a smaller sample size of listed companies of the financial year of 2008 as opposed to this thesis which involves a time period of three years.

Another study which investigated corporate governance in the light of ownership structures in Qatar was by Almudehki & Zeitun (2012). The authors examined the effects of different ownership structures on the performance of 29 non-financial listed firms on the QSE during 2006-2011. The authors used the panel data regression model and linear regression model to test the influence of ownership

structures on company performance. They find that board, foreign, and concentrated ownerships have a positive and significant impact on firm performance. However, this thesis focuses on investigating ownership structures in the light of compliance with mandatory IAS/IFRS disclosures as opposed to the level of performance of the firms in study.

Awadallah (n.d.) investigated the effectiveness of several corporate governance practices on the audit quality of listed non-financial entities in Qatar from 2013 to 2016. The results indicated that managerial ownership and institutional investors have no significant effect on audit quality. Board independence and audit committee are significantly positively linked to audit quality, whereas CEO duality has a significant and negative link with audit quality. Although this study examined similar corporate governance factors selected in this thesis, it studies their impact on audit quality as opposed to their impact on the level of compliance with mandatory IAS/IFRS disclosure requirements.

There are several studies based in the country on the topic of IFRS adoption. Al-Mannai & Hindi (2015) studied the extent of IFRS adoption in Qatar by the listed firms on the Qatar Exchange and the challenges witnessed by these entities whilst implementing the standards. The authors found that there are four key challenges in adopting IFRS in Qatar: education level, external support (external auditors and consultants), staff skills, and increase in judgements that could end in manipulations.

Mardini & Almujaed (2015) initiated a study to compare segmental narrative disclosures under IFRS 8 of 2009 with those of IAS 14R of 2008 in Qatari listed companies. Other similar empirical studies under the same umbrella of disclosure compliance in Qatar include the study by Mardini et al. (2018) who carried out a cross country study to examine the degree of segmental reporting disclosures and the value



relevance it brings in Qatari and Jordanian listed entities in accordance with IFRS 8 where they find that the level of information disclosed varies amongst different sectors and can explain share price variations. Although these three aforementioned studies highlight IFRS adoption in the country setting of Qatar, they differ from the current study. Adoption of standards does not ensure complying with them.

This thesis aims to investigate the compliance with IASs/IFRSs as opposed to their mere adoption as done so by Al-Mannai & Hindi (2015). Likewise, this thesis does not plan to compare between two standards but to include selected standards and investigate compliance with their disclosure requirements. Furthermore, this study will focus on Qatar rather than compare with another country in order to examine the particular features of Qatar and relating them to the broader objective of the thesis. Additionally, this thesis will highlight more IAS/IFRS items as opposed to the study by Mardini et al. (2018).

Mohammadi & Mardini (2016) studied the influence of bank characteristics on IFRS 7 disclosures in listed Qatari banks from 2007 to 2012. The authors found the presence of a risk management committee and the banks size are positively associated with the level of IFRS 7 disclosures. Likewise, Tahat et al. (2018) explored the degree of financial instrument information under IAS 30, IAS 32 and IFRS 7 on a sample of 282 listed Qatari firms between 2005 and 2012. The authors found that the disclosures differ amongst the firms by industry type, year, and category of information. This thesis does not include financial firms and does not opt to study firm characteristics with one IFRS standard as done by Mohammadi & Mardini (2016). Instead, this thesis aims to investigate the disclosures under several selected IASs/IFRSs on listed non-financial entities in the country setting of Qatar and the corporate governance factors that may affect them (opposed to firm characteristics) and during the time period of 2015 to 2017.

On a similar note, this study differs from that of Tahat et al. (2018) as it sheds a light on different IASs/IFRSs and studies governance characteristics such as board characteristics and ownership structures instead of firm characteristics.

Additionally, a handful of studies examined the reporting environment in Qatar amongst different tracks. In the field of corporate annual reports, Alattar & Al-Khater (2008) embarked to empirically investigate views of users of corporate annual reports in Qatar by distributing questionnaires to different user groups. Equally so, Al-Maliki et al. (2015) examined the environment of corporate financial reporting with a focus on investor assessment of annual reports in Qatar. Other studies which have been conducted under the umbrella of reporting in Qatar are associated with corporate social responsibility (CSR) reporting. AlNaimi, Hossain & Momin (2011) set out to investigate the status and level of CSR reporting in the annual reporting of listed financial and manufacturing companies in Qatar for the year of 2007. The authors find that there is a certain extent of disclosure of human resources and product development related information.

Moreover, governance was studied in Qatar but not under the realm of it as a factor of disclosure practices. Sharar (2011) ran a comparative analysis on corporate governance framework in Qatar with the 2004 OECD Principles of Corporate Governance. However, that study did not examine the governance frameworks in the context of a factor. Whereas this thesis opts to examine corporate governance mechanisms and their effects on compliance with accounting disclosures.

To summarize the condition of the studies based in Qatar, there is a lack of literature on the topic of compliance with mandatory IFRS disclosure requirements. This lack in literature presents itself in different aspects which this study intends to cover. Firstly, there are little to no studies in the context of corporate governance in

Qatar; particularly those studying its association to compliance. Also, there is a considerable amount of studies on IFRS adoption, however, compliance with IFRS requirements remains practically untouched. Although the two studies by Mohammadi & Mardini (2016) and Tahat et al. (2018) took place in the country setting of Qatar and examined the level of compliance with IFRS items, they do not examine the factors nor the IAS/IFRS items this thesis opts to study. Primarily, these studies focused on compliance with one or a couple of IAS/IFRS items in Qatari listed firms, whereas this thesis sets out to examine applicable disclosures under more IFRS items. On a similar note, Mohammadi & Mardini (2016) examine bank characteristics, whereas this thesis intends to study corporate governance mechanisms as factors in non-financial listed firms. Also, this thesis study chose a sample between the years of 2015 – 2017, which are years that have not been examined in extant studies.

Therefore, it is safe to denote that there is an eminent gap in the literature in the context of examining corporate governance related determinants on mandatory IFRS disclosure compliance in Qatar. Although Al-Shammari et al. (2008) and Boshnak (2017) included Qatar in their GCC wide studies, they do not cover several aspects that this paper will. Thus, to the best of the author's knowledge, no study was devoted to study the board characteristics and ownership structure factors and the extent of compliance with mandatory IFRS disclosure requirements in Qatar.

All in all, this subsection of the literature review highlighted the relevant empirical literature related to the topic of this thesis. Additionally, it underlined the evident gaps in the literature in several different aspects which will give value to the current study and further concrete the objectives of examining this field topic. Firstly, as denoted in the empirical literature review above, most of the countries conducted in the realm of developing countries on the topic of compliance with IFRS studied its

association with firm characteristics and no other corporate governance structure factors. Hence, this is an eminent gap in the literature which the current study of this thesis opts to address. Also, the previous literature which is of relevance to the topic at hand were all conducted in neighboring countries to Qatar which is also an obvious setting lacking in the literature. On a similar note, studies that focused on the country setting of Qatar chose specific IASs/IFRSs to examine whereas this thesis focuses on highlighting mandatory items under selected IASs/IFRS. Moreover, extant studies in Qatar did not investigate board characteristics and ownership structures as determinants of compliance with mandatory IAS/IFRS disclosure requirements. Therefore, this thesis will add a unique contribution to the literature by investigating the effects of board characteristics and ownership structures on the extent of compliance with mandatory IAS/IFRS disclosure requirements in Qatar.

To conclude, this chapter elaborated on the topic of this paper on a conceptual and empirical level to shape the wholesome view of the study. The first part of the chapter acted as an introduction into various concepts referred to in this thesis such as corporate governance and its mechanisms, IAS/IFRS, and an economic overview of Qatar and the relevance of this topic to the country. The second part of the literature review chapter was an empirical review which shed a light on the various extant studies on compliance with disclosures, corporate governance, IAS/IFRS, reporting related studies in Qatar, and the eminent gap in the literature this thesis opts to tackle.

### **Chapter 3: Theoretical Framework and Hypotheses Development**

This chapter aims to highlight the theoretical basis to heighten the rationale of the overall thesis topic. Moreover, it will also highlight the developed hypotheses based on the empirical evidence found in previous studies.

#### *3.1 Theoretical Framework*

The development of corporate governance on a global scale is denoted as a complex field for the inclusion of various aspects of cultural, legal, structural and ownership differences. Therefore, the extent to which a theory would be considered as 'relevant' to explain the concept of corporate governance, differs from one country to another. Moreover, the relevance of a theory could also depend on the developmental stage the country is witnessing such as its economy, ownership groups, or corporate structures; that determine how corporate governance will develop within its particular setting (Mallin, 2018).

A number of theories may be used to explain the motivation to disclose information and the eminent differences in the compliance levels with IAS/IFRS disclosure requirements in different companies in developing countries. Watts and Zimmerman (1986) state that entities who possess different characteristics will adopt different measurement and disclosure practices, which may insinuate IFRS compliance (Samaha & Khlif, 2016). In addition to the characteristics of each firm, 'regulatory risk' is also assessed by managers when making decisions on the level of mandatory disclosures they provide which consist of reputation, financial, regulatory and litigation risks (Adams, 1994). Therefore, the extent of compliance with mandatory IAS/IFRS disclosure requirements is determined by those regulatory risks tolerated by management and the influence set by the regulations in the market .

Theories that could be used in explaining the compliance levels are the agency theory and market-based theories. These theories have been previously used in literature to clarify the extent of compliance with IFRS in developing countries (e.g. Ahmed & Karim, 2005; Al-Shammari et al., 2008; Samaha & Stapleton, 2009; Al-Akra, Eddie & Ali , 2010; Al Mutawaa & Hewaidy, 2010; Bova & Pereira, 2012). Therefore, there are several theories used in the context of this study in explaining the topic of corporate governance mechanisms and compliance with mandatory IAS/IFRS disclosures. Each theory of relevance to the topic at hand is allocated to a specific group and explained below.

### *3.1.1 Agency Theory*

Jensen and Meckling (1976) define the relationship under agency theory as:

*“a contract under which one or more persons (the principal(s)) engage another person (the agent) to perform some service on their behalf which involves delegating some decision making authority to the agent.”(p.5)*

The agency dispute has been documented throughout history where governance issues arise when principals depend on agents to carry out business activities on their behalf (Tricker & Tricker, 2015). This theory has been used in literature about disclosures (Cooke,1989). This is addressed when the principal gives the agent the decision-making authority whose actions do not meet the objectives of the principal. The interests of the principal and the agent are unaligned or separated, which imposes agency costs (Jensen & Meckling 1976).

The accounting choices and financial information disclosures by managers have been examined through the use of the agency theory which states that the choices made are to reduce agency costs and asymmetric information between insiders (agents) and outsiders (principals). Therefore, compliance with IAS/IFRS could be defined as an

entity making more disclosures and restricting accounting choices, hence agency costs could be used as a valid mean to clarify the company attitude toward complying with IFRS (Samaha & Khelif, 2016).

This theory was the most used theory amongst compliance and disclosure studies in both developed and developing countries (e.g: Al-Mulhem, 1997; Naser, Al-Khatib & Karbhari, 2002; Abd-Elsalam & Weetman, 2003; Al-Shiab, 2003; Al-Shammari et al., 2008; Al-Akra et al., 2010; Rahman, Ismail & Hussin, 2011; Tsalavoutas, 2011; Popova, Georgakopoulos, Sotiropoulos & Konstantinos, 2013; Aljifri et al., 2014).

### *3.1.2 Market-based Theories*

#### *Signaling Theory*

The signaling theory by Spence (1978) explains the behavior in labor markets. It is perceived as an extension of the agency theory (Buskirk, 2012). However, as put by Morris (1987), signaling is a universal phenomenon applicable in any marketplace which has information asymmetry. By using signaling, managers would signal their outlooks and intentions through financial statements. Thus, compliance with IFRS ‘signals’ to the public that the entity is equipped to make more information disclosures and use restrictive standards. As the case with the agency theory, many authors used the signaling theory in their studies in developing and developed countries (Hossain, Perera & Rahman, 1995; Inchausti, 1997; Abd-Elsalam & Weetman, 2003; Al-Shiab, 2003; Leventis & Weetman, 2004; Tsalavoutas, 2011; Aljifri et al., 2014; Alfraih, 2016).

#### *Capital Need Theory*

The capital need theory denotes that firms opt to raise capital in the cheapest manner possible (Samaha & Khelif, 2016). This theory hypothesizes that a firm’s

primary motivation to increase its disclosures is the need for it to raise capital (Abd-El salam, 1999). Therefore, adopting IFRS highlights determined efforts by management to meet increased demand for information which happens when the entity issues more equity (Ashbaugh & Pincus, 2001). Hence, compliance with mandatory IFRS requirements relatively increases the ease at which capital is raised (Marston & Shriv es, 1996). Cooke (1989) gives a few reasons in support of this theory where one states that investors are attracted to disclosures and the fact that it decreases information asymmetries. In short, this theory suggests that there are several variables which could explain the level of compliance with IAS/IFRS. In a similar context, it is found that compliance with mandatory IAS disclosure requirements in Jordan has an eminent effect on the cost of capital (Al-Shiab, 2003). Therefore, this theory is of relevance to the topic of this thesis in explaining the extent of compliance with IFRS disclosure requirements. A number of studies based their research purpose on this theory (Abd-El salam & Weetman, 2003; Al-Shiab, 2003; Fekete, Matis & Lukács, 2008; Tsalavoutas, 2011).

In summary, there are several theories that can be considered as the foundational reasoning of this study. The signaling theory is used by management to showcase their quality through the disclosures made by the firm. Furthermore, the agency theory posits that disclosure will reduce the conflict of interest between the managers and stakeholders by reducing information asymmetry. The agency theory in particular is argued to be the most prominent theory used in studies including corporate governance (Judge, 2012). This could be justified as corporate governance sets the instructions under which the agent works to be in line with the agents interests. Whereas another theory; the capital need theory posits that management of a firm is inclined towards making higher disclosures to raise capital easily in financial markets.



### *3.2 Hypotheses Development*

As formerly highlighted in the preceding subsection, most of the extant studies set out to find the relationship between compliance with disclosure requirements and firm characteristics (such as company age and size, leverage, profitability amongst others) (Demir & Bahadir, 2014). Other studies did in fact study the association between several corporate governance factors and the extent of compliance with disclosures in emerging markets. Nonetheless, there is a shortage in research which study the link between robustness of governance mechanisms and disclosures (Ho & Taylor, 2013). Corporate governance in this thesis will be studied under two categories: board characteristics and ownership structures.

#### *3.2.1 Board Characteristics*

The board of directors has been commonly described by scholars as the formal connecting body between the firm's shareholders and the managers endowed with daily activities in the firm (Mintzberg, 1983). It is positioned at the uppermost level of any apposite and sound corporate governance framework. Therefore, the board plays a vital role in controlling the firm (Jensen & Meckling, 1983). One of the board of directors main responsibilities is preventing any conflicts of interests between managers and shareholders (better known as the agency problem). Likewise, their elemental role is to guarantee the integrity of the firms accounting practices, oversee the performance of management, comply with laws, and warrant adequate investor returns. Therefore, it is safe to claim that a sound composition of board of directors would ultimately mitigate unfavored outcomes and conflicts of interest. There are several distinct features of boards that will be addressed in this thesis as discussed below:

### *Gender Diversity*

One of the utmost important mechanisms of corporate governance control is the role of monitoring, particularly in country settings in which external mechanisms are less developed (Campbell & Mínguez-Vera, 2008). Over the years, there have been several arguments on female representation on the board of directors. Dunn (2012) corroborates that the presence of women on the board is merely a demonstration of diversity and does not improve performance, per se. Bear, Rahman and Post (2010) states that there is a positive association between the reputation of a firm and the percentage of females on the board. However, other studies find that having females on the board translates into benefits beyond meagre diversity and reputational benefits. Nguyen and Faff (2007) stated that having women directors results in greater firm value. Only one study examined the presence of female members on the board and the level of compliance with mandatory disclosure requirements (IAS/IFRS or local accounting standard requirements). Alfraih (2016) found that gender diversity was positively correlated with compliance with mandatory IFRS disclosure by listed Kuwaiti firms. Nalikka (2009) found that the presence of a female CEO and female members on the board is of no significant impact on the levels of voluntary disclosures in annual reports of entities listed on the Helsinki Stock Exchange. To the best of the authors' knowledge, there are neither set laws nor favored best practice guidelines indicating the encouragement or importance of having female members on the board in the State of Qatar. Given the mix in results from previous studies, this study assumes the hypothesis for this variable in the null form to confirm or disconfirm the effect of female members on the level of compliance. Hence, it could be argued in the context of Qatar that:

*H1. There is no relationship between the presence of females on the board of directors*

*and the extent of compliance with mandatory IAS/IFRS disclosure requirements.*

### *Board Size*

Board size is a highly studied characteristic which has possible noteworthy effects on the functionality of the board (Forbes & Milliken, 1999). It is considered to be one of the corporate governance mechanisms which assist in the alignment of the interests of shareholders (Arcay & Vazquez, 2005). Al-Shammari (2014) states that bigger boards have significant positive influence of corporate governance. Additionally, the size of the board could highly impact the quality of financial reports (Hashim & Devi, 2008). Likewise, Krismiaji and Surifah (2019) found a positive relationship between the boards size and the level of compliance with IFRS disclosures. However, other authors tend to differ with the idea that bigger boards provide greater advantages. Instead, Goodstein, Gautam and Boeker (1994) highlight that when size and diversity in expertise increase on the board, they may not be suited for making strategic-decisions in a timely manner in response to critical surrounding changes. On a similar note, Mak and Li (2000) claim that boards that are smaller in size are expected to function more effectively. It has also been documented that companies with small boards have higher financial ratios (Yermack, 1996). On that note, Ebrahim and Fattah (2015) claim that large boards may have a negative effect on the board's effectiveness as a result of coordination and communication issues linked to bigger groups.

Associating board size as a factor influencing compliance with mandatory disclosure requirements (IAS/IFRS or local standards) has been studied in many previous studies on the topic. However, the results documented were mixed. Some studies found a significant positive influence of board size on compliance with mandatory IFRS disclosures such as Barako et al. (2006), Al-Akra et al (2010) and

Alfraih (2016). Al-Sartawi, Alrawahi and Sanad (2016) found a significant and negative relationship between board size and compliance with IAS 1 disclosures in Bahrain. Hassaan (2013a), Hassaan (2013b), and Juhmani (2017) found no significant association between board size and compliance with IFRS disclosures in Jordan, Egypt, and Bahrain, respectively. Similarly, Ebrahim and Fattah (2015) found no significant association between board size and compliance with IAS 12 requirements in Egypt.

In the context of Qatar, Article (95) of law No. 11 of 2015: ‘Promulgating the Commercial Companies law’ states that the composition of the elected board of a shareholding company should consist of no less than five members and shall not exceed eleven. Since the article states the acceptable number of members and does not stress on a larger board size, in addition to the mixed results from previous studies, it is hypothesized that:

*H2: There is no relationship between the board of directors’ size and the extent of compliance with mandatory IAS/IFRS disclosure requirements.*

#### *CEO Duality*

Duality occurs when the CEO and Chairman positions are held by the same individual (Ujunwa, 2012). Combining the two roles would result in the lack of decision control and management (Fama & Jensen, 1983). According to Forker (1992), role duality is one of the corporate governance factors which is a matter of concern as it allows for the presence of the dominant personality which has been linked to poor disclosure practices. Equally, Ho and Wong (2001) set forth an argument which denotes that the combination of these roles would surely lead to the individual withholding negative information from outsiders. Additionally, Haniffa and Cooke (2002) state that when the Chairman and CEO positions are by one individual, the boards governing will

be compromised because the person would select board members, agenda items, as well as be in control of board meetings.

The agency theory calls for the separation of these roles in order to ensure a proper check and balance system on managements performance (Haniffa & Cooke, 2002). The separation of the roles of the CEO and Chairperson would aid in improving the quality of monitoring and minimizing obtained from retaining information, thus enhancing reporting quality (Forker, 1992). Furthermore, Holtz and Neto (2014) found that the informativeness of reporting information is associated with the separation of the Chairman/CEO role.

Studies by Ebrahim & Fattah (2015) and Alfraih (2016) note a significant negative association between CEO duality and compliance with mandatory IFRS disclosures; indicating that compliance is higher when there is no duality. Similarly, Juhmani (2017) records a negative association between CEO duality and compliance with IFRS disclosures in Bahrain. Rahman et al. (2011) found no significant relationship between CEO duality and compliance with mandatory MASB disclosures. Likewise, Hassaan (2013a) states that there are no differences that are statistically significant in the extent of compliance with IFRS disclosures in companies whom separate roles of the chairperson and CEO and those who do not.

International and local codes support the separation of these top roles; to concrete the existence of a proper ‘check and balance’ system. This is eminent in the Cadbury Report of 1992, QSE and QFMA rulebooks (QSE, 2015; QFMA 2017). Article (7) ‘Prohibition of Combining Positions’ in the Governance Code for companies by the QFMA states that it is prohibited for the position of the Chairman to be combined with any executive position in the firm (QFMA, 2017). However, the state of Qatar follows a ‘comply or explain’ approach (Shehata, 2015); consequently should a listed

entity have a case of role duality, it would report it. Although CEO role duality is likely to be uncommon in Qatar, it would be worthy to examine this possibility. Therefore, in the context of Qatar, it is hypothesized that:

*H3: There is no relationship between CEO duality and the extent of compliance with mandatory IAS/IFRS disclosure requirements.*

#### *Founding Family Members on the Board*

A family firm is considered so if one of its original founders or descendants maintain their positions in management, the board, or among the largest shareholder group (Anderson & Reeb, 2003; Wang, 2006; Ebrahim & Fattah, 2015). Burkart, Panunzi, and Shleifer (2003) claim that it is dominant across publicly traded companies worldwide to have family ownership and control. Hence, the main characteristic is the existence of one or more controlling family and their involvement in managerial aspects of the firm (Floros, Spanos, Tsipouri & Xanthakis, 2008). The main attribute found amongst family firms is that the family is involved in the process of major decision making (Mellin & Nordqvist, 2000). Porta, Lopez-de-Silanes, Shleifer, and Vishny (1998) state that family ownership is found to be common in developing countries. The common perception arguing in favor of family firms is the notion of minimized agency costs as a result of ownership and management being the same person or persons from the same family (Floros et al., 2008). Al-Shammari (2014) further states that it is likely in family owned firms for members of the family to have positions as executive and non-executive directors.

Alanezi & Albuloushi (2011) as well as Ebrahim and Fattah (2015) identify a significant positive association between founding family members on the board and compliance with disclosures. Ho and Wong (2001) found that the existence of family members on the board is negatively related to the level of voluntary disclosure.

Abdullah et al. (2015) and Alfraih (2016) found a significant negative correlation between the percentage of family members and disclosures. This result is in line with findings by Mohamed and Sulong (2010) who state that entities with a larger number of family members have poorer disclosures on their annual reports.

Furthermore, in the context of Qatar, there is no legislation restricting or highlighting the number of family members on the board in firms. Schulze, Lubatkin, Dino & Buchholtz (2001) claim that family associations to businesses lead to agency problems in relation to management additionally challenging to resolve because of altruism. Particularly, firms with a high number of family members are doubtfully to comply with requirements pertaining to corporate governance and their board are less keen on complying with mandatory disclosures as opposed to firms not run by families (Abdullah et al., 2015). Likewise, Boshnak (2017) states that family members on the board have more access to information on the company and have no intentions in disclosing it to the public; leading to lower disclosures. Therefore, in order to confirm or disconfirm the possibility of a founding family member on the board exerting influence on the extent of disclosures, it could be hypothesized that:

*H4: There is no relationship between the presence of founding family members on the board and the extent of compliance with mandatory IAS/IFRS disclosure requirements.*

#### *Non-executive Directors*

One of the traditional mechanisms of good corporate governance is the number of non-executive directors present on the board (Ebrahim & Fattah, 2015). This characteristic is universally accepted as a necessary corporate characteristic (Juhmani, 2017). It is often argued that boards characterized with a higher percentage of non-executive directors are anticipated to be more effective in their function of monitoring and encouraging increased levels of transparency (Gul & Leung, 2004). Therefore, non-

executive board members play a vital role in overseeing the behavior of management and limiting managerial opportunism (Fama & Jensen, 1983; Ebrhaim & Fattah, 2015). As depicted by the agency theory, these board members can reduce information asymmetry (Porta et al., 2002; Allegrini & Greco, 2013). Furthermore, Mangel and Singh (1993) deem that non-executive members of the board enjoy more opportunity for control, whereby Haniffa and Cooke (2002) refer to non-executive directors as the 'check and balance mechanism', which enhances the effectiveness of the board and as advisors who ought to increase the disclosure quality of the firm. Although the literature stresses on the importance of non-executive directors on the board, previous studies yielded mixed results on the effect of the proportion of non-executive directors on financial disclosures.

Forker (1992) documented that an increase in the proportion of non-executive directors results in financial disclosures of higher quality. Likewise, other studies indicate that firms with a higher number of non-executive directors are less likely to have financial statement fraud (e.g. Beasley, 1996; Ajinkya et al., 2005). On the other hand, Ebrahim and Fattah (2015) found that there is no support to prove a significant effect of non-executive directors on the initial compliance with IFRS. On a similar note, Haniffa and Cooke (2002) indicate an insignificant negative relation with voluntary disclosures made in Malaysia. Aljifri et al., (2014) depict that outside directors have a positive but insignificant correlation to the extent of disclosure. Eng and Mak (2003) found a significant negative effect of non-executive directors on voluntary disclosure in Singapore. Other studies found no impact of the number of non-executive directors on the extent of mandatory disclosure (Hassaan, 2013b; Aljifri et al., 2014).



The QFMA governance code defines a non-executive director as ‘A Board member who does not have a full-time management position at the Company or who does not receive a wage’ (QFMA, 2017, p.12). Although these members are highlighted in the governance code of the country, the contribution of their presence on the board yielded mixed empirical results in extant studies. Therefore, it can be hypothesized that:

*H5: There is no relationship between the proportion of non-executive directors and the extent of compliance with mandatory IAS/IFRS disclosure requirements.*

#### *Cross-directorships (Multiple Directorships)*

In a period in which corporate governance is increasingly scrutinized, a considerable number of debates highlighted the effectiveness of the boards monitoring role in publicly traded firms. A noteworthy factor of that debate was centered around the question of whether directors should serve on numerous boards or be obligated to do so (Fich & Shivdasani, 2006). The phenomenon of interlocking boards is when an individual sits on the board of two or more firms; forming a link between them (Fich & White, 2005).

The proper functionality of the board of directors is not only exclusively and merely dependent on its independence from managers and its composition. The time availability of board directors is of equal importance (Guerra & Santos, 2011). As indicated in the prior sections of this thesis, one of the boards main activities is monitoring or overseeing the overall activities of the managers in the company, which they should be able to do should they have the time factor. Likewise, one of the multiple factors considered to impact the effectiveness of the monitoring role of the board is multiple or cross directorships (Campbell & Mingues-Vera, 2008). Therefore, studying the effect of busy boards (also referred to in this thesis as interlocking directorates, busy directors, multiple directorships or cross directorships) should be of interesting essence

to this thesis.

Interlocking directorates have received attention in various different studies (e.g. Fich & White, 2005; Fich & Shivdasani, 2006; Guerra & Santos, 2011). The outcome of directors sitting on multiple boards could be argued to be a positive one as it allows for sharing experience and bringing in new resources. Therefore, arguments revolving cross-directorships are based on the resource dependence theory (Davis, 1996). It is asserted that CEO's interlocking on different boards is desired as a result of their experience and credibility as peers (Lorsch & MacIver, 1989). Dahya, Lonie and Power (1996) favor interlocking boards as they would offer insights from personal knowledge of other firms. Additionally, it influences the members' independence and ushers a competitive disadvantage (Davis, 1993). On the other hand, by having a presence on several boards, those members may be confronted with scarcity of time where they might find themselves to be too busy to perform their roles sufficiently (Guerra & Santos, 2011). Likewise, it is argued that busy directors are more likely to be absent from board meetings (Jiraporn, Davidson, Ning & DaDalt, 2008). Additionally, a recurrent viewpoint amid policy advocates and investors is that attending several boards may lead to overloaded directors whom will not be effective monitors of the management (Fich & Shivdasani, 2006). Guerra and Santos (2011) find that busy directors are less independent, less active, less relevant to firms, and less inclined to monitor and evaluate executive's activities in the company; which may lead their companies to the exposure to unpredictable risks.

The different arguments pertaining to multiple directorships have been previously studied in relation to disclosures. Haniffa and Cooke (2002) denote that cross-directorships by board members have noteworthy inferences on disclosure practices. Similarly, Alfraih (2016) found a significant positive association between this

factor and the extent of compliance with disclosures.

Qatar imposes laws on the acceptable number of boards directors may sit on simultaneously. The Commercial Companies Law 11 of 2015 states that members of the board are limited to be on no more than two listed QSE entities. According to Article (7) “Prohibition of Combining Positions’ in the QFMA governance rulebook, “it is prohibited for any person to be a board member for more than three shareholding companies which their headquarters located in the State” (QFMA, 2017, p.20). Therefore, this raises the interest for this thesis to investigate the possibility of multiple directorships benefiting or costing companies in relation to compliance with IAS/IFRS disclosure requirements. Busy boards may be considered inactive, dependent and lack proper monitoring of top management and the company’s performance. Hence, they would less likely have the time to actively monitor the compliance with IAS/IFRS. However, multiple directorships have also been considered to benefit companies in terms of sharing insights of other firms. Based on the varying viewpoints contributed by extant studies in the abovementioned arguments, this thesis hypothesizes that:

*H6: There is no relationship between the involvement of a board member in other listed entities in Qatar and the extent of compliance with mandatory IAS/IFRS disclosure requirements.*

### *3.2.2 Ownership Structures*

A vital contextual element in GCC countries in association with corporate governance is the firm’s ownership structure (Baydoun, Maguire, Ryan & Willet, 2013). Ownership structures and conflicts of interests have molded discussions on corporate governance (Cunha & Piccoli, 2017). The type and diffusion of equity owners have long been suggested as significant variables in explaining levels of disclosure (Haniffa & Cooke, 2002). The factor of ownership is relevant in explaining levels of

transparency as when ownership is greatly concentrated, the demand for information is less (Arcay & Vázquez, 2005). Denis and McConnell (2003) imply that ownership structures revolves around the size and the identities of ownership of stockholders. Thus, ownership structures of listed entities may have an influence on the quality and extent of the entities disclosure practices (Eng & Mak, 2003). Also, entities with diffused ownerships lead to an increase in agency costs (Boycko, Shleifer & Vishny, 1996). Hence, managers of companies may increase disclosures for owners to monitor their interests; as a mean to reduce agency costs (Al-Akra et al., 2010).

To elaborate, disclosures are likely to be greater in companies with diffused ownerships because it acts as a monitoring tool for the owners to oversee management behavior as denoted by the agency theory (Leftwich, Watts & Zimmerman, 1981; McKinnon & Dalimunthe, 1993; Raffournier, 1995; Haniffa & Cooke, 2002). Prior studies appear to have poured an adequate level of attention and empirically studied the significant relationship of ownership structures alongside the effectiveness of corporate governance (Gray, Meek & Roberts, 1995; Dwivedi & Jain, 2005; Krivogorsky, 2006). Several studies shed light on ownership structures as determinants of the extent of compliance with disclosures (e.g. Owusu-Ansah, 1998; Naser et al., 2002; Eng & Mak, 2003; Ghazali & Weetman, 2006; Abdelsalam & Weetman, 2007; Al-Shammari et al., 2008; Al-Akra et al, 2010; Alanezi & Albuloushi, 2011; Hassaan 2013a; 2013b).

As previously stated, although there are a number of studies which set out to examine factors of ownership structures as determinants of mandatory compliance (including mandatory IFRS disclosure compliance), are quite absent as opposed to those which studied corporate characteristics with the level of compliance with disclosure requirements. Consequently, this thesis opts to study the ownership structure

variables below as determinants of compliance with mandatory IAS/IFRS disclosure requirements.

### *Institutional Ownership*

Major holders of equity whose decisions to buy or sell can affect disclosure policies of management and share prices are institutional investors (El-Gazzar, 1998). Their hefty stakes in firms allow them to be considered as the most important in corporate governance structures (Soliman, Ragab & Eldin, 2014). Additionally, Shleifer and Vishny (1997) state that institutional investors have a greater ability in monitoring behavior of management than scattered investors. Healy, Hutton and Palepu (1999) claim that institutional ownership has a positive relation to the level of corporate disclosures as a result of increased demand and pressure from those institutional investors.

This thesis chose to explain this variable through the agency theory, the signaling theory as well as the capital need theory for the purposes of securing this variable on theoretical grounds. In order to receive funding, entities would opt to disclose as much information as possible for the purposes of transparency and to reduce the chances of the agency problem. Likewise, the signaling theory describes the use of disclosures to disseminate certain company news or disclosures to attract further investment. As argued by Ahmed and Nicholls (1994), countries where the primary source of funds for companies come from financial institutions, will disclose increased information on their reports. This disclosure of detailed information enhances the possibility of receiving funds from financial institutions (Juhmani, 2013). Also, Healy and Palepu (2001) denote that these investors are rigorous about the timing and quality of the information demanded. Hence, it is safe to denote that the capital need theory can also be applied to those other institutional investors and the use of this thesis.

Ebrahim & Fattah (2015) found that institutional ownership is significantly and positively associated with the compliance with IAS 12 disclosures made by Egyptian listed companies in 2007. Boshnak (2017) record a negative impact of institutional ownership on the level of disclosure. Others document no impact of institutional ownership on disclosure (Al-Shammari et al., 2008; Al-Akra et al., 2010). Given the eminent mixed results contributed by extant studies, it is hypothesized that:

*H7: There is no relationship between institutional ownership and the extent of compliance with mandatory IAS/IFRS disclosure requirements.*

#### *Government Ownership*

It is argued that entities which are controlled by a dominant government ownership may disclose more information to mirror the countries commitment to be transparent (Cheng & Courtenay, 2006). The government could act as a factor of influence on the practices of financial reporting through regulators, where the regulator influences financial reporting practices to serve the needs of the government in terms of economic development and political stability (Cooke, 1990). This was further concreted by the study of Li and Harrison (2008) who denote that the board of directors will appear responsible and legitimate to the public once they make more disclosures. However, the results on the association between the level of disclosures made and government ownership are mixed. Eng and Mak (2003), Abd-Elsalam & Weetman (2007), and Boshnak (2017) found that government ownership has a positive impact on mandatory disclosure. Likewise, Naser and Al-Khatib (2000) document a significant positive impact of government ownership on corporate disclosure. However, Naser et al. (2002) and Hassaan (2013b) found that there is no impact on mandatory disclosure; having no association between government ownership and the level of disclosure. Likewise, in their study in Malaysia, Ghazali & Weetman (2006) found that

government ownership does not encourage higher disclosure and better transparency. Likewise, Juhmani (2017) finds no impact of government ownership on compliance levels in Bahrain. As a result of the inconsistency of results, the null hypothesis for this variable reads:

*H8: There is no relationship between government ownership and the extent of compliance with mandatory IAS/IFRS disclosure requirements.*

#### *Foreign Ownership*

Hassan (2015) argues that from a ‘power’ standpoint, increases in foreign investment could urge firms to provide more information. Boubakri, Cosset and Guedhami (2005) state that foreign investors call for higher disclosure standards and preserve an effective monitoring of management. This may be because, as put by Naser et al. (2002), foreign investors are highly likely to request higher standards of disclosure as a result of being more experienced in international and regional markets. Also, they are more apt to invest in entities that disclose more information (Mangena & Tauringana, 2007). Likewise, it is also argued that demand for information is higher by foreign investors given the geographical separation between owners and managers (Craswell & Taylor, 1992). Similarly, it is often contended that foreign ownership could enhance an entity’s practices in corporate reporting (Lambert, Leuz & Verrecchia, 2007). Moreover, foreigners are willing to invest in countries whose companies adhere to exceptional disclosure practices.

The theory used to support this hypothesis is the capital need theory as Cooke (1989) states that investors are attracted to disclosures and the fact that it decreases information asymmetries. Also, the agency theory states that firms with a higher level of outsider ownership are inclined to share more information than those with closed ownership structures (Boshnak, 2017). Bearing in mind Qatar’s efforts to attract foreign

investments to the country by implementing investor reports laws alongside new reinstated laws to allow for foreign ownership, it would be of high interest to examine whether the adoption of and compliance with internationally renowned disclosure requirements does in fact come as a result of foreign ownership. In Qatar, Almudehki and Zeitun (2012) found a positive impact of foreign ownership on firm performance. Likewise, Alhazaimeh et al. (2013) found a significant positive association between foreign ownership and disclosure. Previous studies evinced mixed results on the matter. Hassan (2015) found an insignificant association between foreign ownership and corporate disclosures. Naser et al. (2002), Crowley (2011), and Aljifri et al. (2014) document no impact of foreign ownership on mandatory disclosures. Extant studies that examined the association of foreign ownership and the level of compliance with disclosures yielded mixed results, therefore:

*H9: There is no relationship between foreign ownership and the extent of compliance with mandatory IAS/IFRS disclosure requirements.*

To conclude, this chapter shed a light on the several theories this study is based on such as the agency theory, capital need theory, and the signaling theory. This chapter continues by developing the hypotheses for this study based on the empirical evidence.



## **Chapter 4: Methodology**

This chapter sets out to highlight the methods used to accomplish the empirical testing of the topic at hand. It highlights the data collection method for various variables and the sources used. First, the sample selection and time period selection is explained and justified. Next, the process of data collection for the independent variables is discussed for board characteristics and ownership structure variables as well as the control variables. After that, the data collection for the dependent variable and the steps of constructing its index is cited in its completeness alongside the two different scoring methods used to reach the final compliance score. Finally, this chapter ends with an illustration of the two models that will be used in this paper.

The objectives of this research are concomitant with disclosure practices in general and IAS/IFRS mandatory disclosure practices in listed Qatari entities in particular. To accomplish the set objectives, this thesis examines several corporate governance factors in the realm of ownership structures and board characteristics and how influential they are on the level of compliance with mandatory IFRS disclosure requirements in Qatar. Hence, this thesis uses a quantitative research design to accomplish the objectives.

The data for this thesis was gathered from multiple sources. Information needed for the independent variables of board characteristics and control variables were collected from company annual reports and yearly corporate governance reports. Data gathered for the independent variables relating to ownership structures was obtained from Bloomberg Terminal. Furthermore, data used to construct the index for mandatory IFRS disclosure requirements was obtained from the KPMG 'IFRS Guide to Annual Financial Statements – Disclosure Checklist' for the years of 2015, 2016, and 2017. These will be discussed in detail in the subsequent sub-sections.

#### *4.1 Time Period and Sample selection*

This thesis is longitudinal in its kind where it will focus on the fiscal years of 2015, 2016, and 2017 with a total sample size of 72 annual reports of listed non-financial entities. There are several reasons for this selection. Firstly, the number of listed entities of one year on the QSE is low; given the fact that this thesis will exclude all financial and insurance listed entities. Therefore, three consecutive years were chosen in order for this study to have an acceptable sample size that would revert reliable results. Moreover, this thesis would add to the small number of studies which embarked on studying the extent of compliance with mandatory disclosures over a couple of years such as: Yeoh (2005), Al-Shammari et al., (2008), Al-Akra et al. (2010), Agyei-Mensah (2017), and Boshnak (2017). Also, these years were not covered by studies on disclosure compliance in Qatar which heightens the interest to examine this over a few years. Other reasons pertaining to the choice of these years are that the IFRS disclosure rules had minor changes during the course of these three years; adding consistency to the index that will be developed. In reference to Silvia (2019), minor changes issued in IASs/IFRSs over the years of 2015 to 2017 had an effective date after the time period selected to be studied in this thesis. Also, the region lives in an ongoing case of diplomatic unrest as Qatar witnessed an embargo in the middle of 2017; amplifying interest to examine the compliance with disclosures and the reporting environment.

The selected companies for this thesis were selected from the original site of the Qatar Stock Exchange. There were 43, 44 and 45 listed entities on the QSE across 7 different industry classifications in the years of 2015, 2016, and 2017; respectively. Annual reports of entities initially listed in the years of 2016 and 2017 were removed in order to maintain consistency amongst the sample to 129 annual reports. In order to

decrease chances of bias and to maintain coherence, this study excluded listed financial and insurance companies from the sample as they adhere to different disclosure rules and their transactions are not of equivalency to those of non-financial entities (Alfraih, 2016). This is consistent with previous similar studies (eg: Haniffa & Cooke, 2002; Tsalavoutas, André & Evans, 2012; Alfraih, 2016). Therefore, a total of 51 annual reports of listed entities under the classifications of ‘Banks & Financial services’ and ‘Insurance’ over the years of 2015, 2016, and 2017 were excluded from the study bringing the sample to a total set of 78 non-financial listed entities. However, after thorough scrutiny of the data collected, it was apparent that there was no information on the ownership structure variables for two companies across all three years. Therefore, these companies were also excluded from the sample; resulting in a sample of 72 annual reports (24 listed entities for each year).

The industrial classifications of the firms included in this thesis are based on their classification on the original site of the QSE. The sectors of the studies included in this thesis are: Consumer Goods & Services, Industrials, Real Estate, Telecoms, and Transportation. The final sample selected based on industrial classifications is shown in Table 1.

Table 1. Breakdown by Industrial Classifications of Listed Non-financial Entities

Industrial Classification	Total Number of Companies/ year	Total Sample size over 3 years	(%)
Consumer Goods & Services	7	21	29
Industrials	8	24	33
Real Estate	4	12	17
Telecoms	2	6	8
Transportation	3	9	13
<b>Total</b>	<b>24</b>	<b>72</b>	<b>100</b>

#### *4.2 The Independent Variables: Board of Directors Characteristics and Ownership Structures*

There are nine independent variables in this study classified under two different corporate governance factors: board characteristics and ownership structures. The first corporate governance factor examined in this thesis is the characteristics or structures of boards. This thesis opts to study this in the light of six different variables constituting board characteristics, namely: board size, presence of female members on the board, CEO duality, non-executive directors, members of the founding family on board, and cross-directorships. The data collected for these variables were taken from company annual reports or corporate governance reports available on each company's respective website.

The second corporate governance factor studied in this thesis was ownership structures, specifically: government, institutional, and foreign ownership. Data for these variables were collected from Bloomberg Terminal for several reasons. Firstly, ownership classification information in company annual reports were little to none. Additionally, a majority of corporate governance reports of companies did not disclose ownership information. Therefore, governance reports as an option of a source were dismissed as (1) most of the companies do not have that information disclosed, and (2) it would be irrational to remove half the sample for unavailability of ownership structure information from one source whilst keeping those companies of which ownership structure information is available. Thus, the researcher resolved to using Bloomberg Terminal as a source of ownership structure information for each fiscal year included in this study.

Data derived from the terminal was clear except for the data pertaining to the variable of foreign ownership. The percentages taken for this variable were extracted

from the Bloomberg classification based on geographic locations where all country ownership percentages (except Qatar) were added together. The information derived from the terminal was further filtered by the researcher in an effort to control the chances of biased results. This was done by filtering percentages listed under the geographic setting of 'unknown' found under 'geographic classification' as it may have been referring to the State of Qatar.

In addition to the abovementioned independent variables, several control variables were taken into consideration in this study for their eminent influence on the dependent variable studied as depicted in other studies.

### *3.2 Control Variables*

As previously mentioned, countless studies set out to study the association or influence several firm characteristics may have on the level of mandatory disclosures (generally and mandatory IAS/IFRS disclosures). The results of the studies documented mixed results on whether certain characteristics have an impact on compliance with disclosure requirements. In line with previous studies on the compliance with mandatory IFRS disclosures by Hassaan (2013a; 2013b), Alfrah (2016), Al-Sartawi et al. (2016), this thesis will use certain control variables.

#### *4.2.1 Firm size*

Previous studies reported that firm size is the utmost influential characteristic in explaining practices associated with mandatory disclosures (e.g: Galani et al., 2011; Aljifri et al., 2014). Al-Shammari et al. (2008) set forth that companies that are greater in size possess more resources and thus spend more on compliance and are less possible to be affected by information disclosure than small firms. In other words, firm size is considered a sign of economies of scale (Hassan, 2015). Several studies found that firm size is positively related to the level of a company's compliance with mandatory

disclosures or disclosures in general (e.g. Wallace & Naser, 1995; Owusu-Ansah, 1998; Naser et al., 2002; Al-Shiab, 2003; Eng & Mak, 2003; Akhtaruddin, 2005; Al-Ulis, 2006; Al-Shammari et al., 2008; Fekete et al., 2008; Al Mutawaa & Hewaidy, 2010; Galani et al., 2011; Agyei-Mensah, 2013; Mardini et al., 2013; Aljifri et al., 2014; Rahman & Hamdan, 2019). In Qatar, Al-Moghawli (2009) documents a significant positive association between firm size and IFR; as did Hossain and Hammami (2009) on voluntary disclosures. In line with the studies of Glaum and Street (2003) Hassaan (2013a), Hassaan (2013b), Alfraih (2016), and Al-Sartawi et al. (2016) firm size will be used in this thesis as a control variable and will be calculated by taking the natural logarithm of total assets to control for the size effect in line with Alfraih (2016).

#### *4.2.2 Liquidity*

Prior studies recorded mixed results on liquidity where Al-Akra et al. (2010) found a positive association between liquidity and disclosures. However, Wallace and Naser (1995), Naser and Al-Khatib (2000), and Naser et al. (2002), found a negative association between the variables. Wallace and Naser (1995) and Agyei-Mensah (2013) found no impact of liquidity on mandatory disclosure. Hence, as claimed by Hassaan (2013a), identifying the relationship between liquidity and levels of compliance is unpredictable. Therefore, company liquidity shall be a control variable in this thesis, in accordance with studies of Hassaan (2013a) and Alfraih (2016).

#### *4.2.3 Profitability*

As the case with liquidity, results documented by prior studies on the influence of profitability on disclosures are mixed (Hassaan, 2013a). In Qatar, Al-Moghawli (2009) documents a significant positive association between profitability and IFR. Most studies found a positive effect of profitability on compliance with mandatory disclosures (Naser & Al-Khatib, 2000; Naser et al., 2002; Akhtaruddin, 2005; Al-

Shammari et al., 2008; Al-Akra et al., 2010; Yiadom & Atsunyo, 2014; Alrawahi & Sarea, 2016). On the other hand, Wallace and Naser (1995) report a negative impact of profitability on disclosures. In harmony with previous studies of Glaum and Street (2003), Hassaan (2013a), Alfraih (2016), and Al-Sartawi et al. (2016), profitability will be considered as a control variable.

#### *4.2.4 Firm age*

Studies in developing countries found a positive association of firm age with compliance level with mandatory disclosure. Alrawahi and Sarea (2016) argue that large companies may be older than smaller firms and hence find compliance less costly as a result of their conventional reporting systems. Furthermore, Cerbioni and Parbonetti (2007) state that it is often perceived a proxy for risk. Therefore, firms that are older as opposed to younger firms are anticipated to disclose more information in their annual reports (Owusu-Ansah, 1998; Glaum & Street, 2003; Alfaraih, 2009). Several previous study found that firm age is positively associated with the extent of compliance with mandatory disclosures (Owusu-Ansah, 1998). In the context of Qatar, Hossain and Hammami (2009) found a positive association between the age of the firm and the level of voluntary disclosures. Others found no impact on the extent of disclosures (Alanezi & Albuloushi, 2011). This thesis will measure firm age by the amount of years since listing in line with studies by Alfraih (2016), Al-Sartawi et al. (2016) and Boshnak (2017).

#### *4.2.5 Auditor type*

Previous studies conducted in the realm of disclosure compliance recorded various results pertaining to the correlation between the type of external auditor and compliance with disclosure requirements. Street and Gray (2002), Glaum and Street (2003), Santos et al. (2013) indicate a positive relationship between the levels of

compliance with IAS disclosure requirements and being audited by one of the Big 4 audit firms. Rahman et al. (2011) found no significant influence of this variable on compliance with MASB accounting standards. Likewise, Al-Shammari & Al-Sultan (2010) found no significant relationship between auditor type and voluntary disclosure. Al-Akra et al. (2010) state that there is a significant association between auditor type and compliance with IFRS disclosures. Alrawahi and Sarea (2016) state that there is a positive association between auditor type and compliance with mandatory IAS 1 requirements. In the same vein, Mardini et al., (2013) and Yiadom and Atsunyo (2014) found auditor type to have a positive influence on IFRS compliance. Based on mixed evidence by prior research, the type of auditor will be considered a control variable in line with studies by Hassaan (2013a), Hassaan (2013b) and Al-Sartawi (2016).

Other control variables which were not included in this thesis were industry type and years. The reason for omitting these two variables as controls are based on several reasons. Firstly, this thesis excludes all listed financial and insurance firms as they would naturally have their own set of accounting disclosure to adhere to. This limits bias in the thesis since most of the other non-financial entities follow the same disclosure practices. Likewise, although this thesis included a sample from the years of 2015, 2016, and 2017, results of the mandatory disclosure index under both scoring methods used did not raise concerns of any discrepancies between those years' results (see chapter 5, section 5.1).

#### *4.3 The Dependent Variable: Mandatory disclosure index*

##### *4.3.1 Index construction & IAS/IFRS selection*

Marston & Shrives (1991) state that a reliable measurement tactic for corporate compliance is a properly-constructed compliance index. To achieve the objectives of this thesis, the level of compliance with IFRS mandatory disclosures is measured by a



self-constructed index in line with many previous studies on mandatory IFRS disclosures (Cooke, 1992; Tower et al., 1999; Street & Gray, 2002; Al-Shammari et al., 2008; Alfaraih, 2009; Aljifri et al., 2014, Alfraih, 2016). The reference documents used to construct the index were the KPMG ‘IFRS Guide to Annual Financial Statements – Disclosure Checklist’ for the years of 2015, 2016, and 2017 (KPMG, 2015, 2016, 2017).

The mandatory disclosure index (INDEX) was constructed by undergoing several steps. Based on the reference document, there are 45 effective IAS/IFRS standards. However, only 12 were chosen for the purpose of this thesis and 33 were excluded for their inapplicability to the Qatari reporting environment or for the sample of companies highlighted in this study. Also, any minor changes to IASs/IFRSs issued over the years of 2015, 2016, and 2017 had an effective date after the years studied in this thesis. Hence, these items were also excluded. Furthermore, other standards were removed from this thesis based on judgement and thorough checks by auditors from the Big 4.

The choice of the IASs/IFRSs in the self-constructed index was tailored to fit the unique country setting of Qatar and its applicability to the non-financial sector. This is in line with the methods taken by previous studies with topics on similar grounds, i.e.: interest to study the level of compliance with mandatory disclosure items (e.g. Alfraih, 2016; Boshnak, 2017). Therefore, in line with the previous study by Boshnak (2017), the selection of IFRS standards for the mandatory disclosure index is based on the following criteria:

1. Relevance of the IFRS and its associated disclosure items to the country setting of Qatar for the years ended 2015, 2016, and 2017;
2. Relevance of the IFRS and its items to the listed entities chosen for this thesis;

3. Relevance to the objectives/motives of this thesis.

The chosen 12 IAS/IFRS standards were adequately inspected for their items characterized as mandatory disclosure requirements. Other items that fell under each standard which were simply defined as suggested, encouraged or voluntary, were excluded from the disclosure index. Thus, the disclosure requirements of the standards were combined to create a self-constructed comprehensive index comprising a checklist of 216 mandatory disclosure items, which are obligated to be followed for the financial years included in this study.

However, since the standards and their items chosen for the index of this thesis were picked on the basis of their relevancy and applicability to Qatar and the sample, an element of subjectivity was involved. Also, there is a possible issue of duplication where there is a probable chance of including an item more than once in the disclosure index should it be required under other standards as well (Vlachos, 2001; Tsalavoutas & Evans, 2010).

Nonetheless, in order to ensure validity and limit extreme subjectivity as well as duplication in the selection of the chosen standards and their disclosure items in the mandatory index, several steps were taken to reach a conclusion on including them in order to achieve the objectives and motives of this thesis:

1. IFRS implementation related studies conducted in countries in the Middle East (and the GCC in particular) were examined in order to determine which items are relevant and used in the accounting environment of listed entities in the region, in line with Boshnak (2017);
2. Confirming that the chosen standards are in fact disclosed in several annual reports of the listed entities chosen for this study across several years. Similarly,

those IFRS not added to this study were also searched in annual reports to confirm their inapplicability in Qatar or the listed entities chosen for this study;

3. Discussion with two IFRS professionals from KPMG to assure the IASs/IFRSs and their associated disclosure requirements are relevant to the objectives of thesis and to the sample chosen and that they constitute as disclosure items. This is in line with steps undertaken and advised by previous studies by Tsalavoutas and Evans (2010), Abdullah et al. (2015), Boshnak (2017).

The selected IASs/IFRSs included in the disclosure index of this thesis are highlighted in Table 2 Excluded items along with explanatory reasons for their omission are in Appendix A . As illustrated in Table 2, the IAS/IFRS standard with the least number of mandatory requirements is IAS 23: ‘Borrowing Costs’ in comparison to IAS 1: ‘Presentation of Financial Statements’, which ultimately holds the highest number of mandatory disclosure requirements.

Table 2. Number of Selected IASs/IFRSs and Mandatory Disclosure Items

<b>Standard</b>	<b>Title</b>	<b># of items used</b>	<b># of items not used</b>
IAS 1	Presentation of Financial Statements	56	43
IAS 2	Inventories	7	1
IAS 7	Cash-Flow Statements	28	14
IAS 16	Property, Plant, and Equipment	19	4
IAS 18	Revenue	6	0
IAS 21	Effects of Changes in Foreign Exchange Rates	4	6
IAS 23	Borrowing Costs	2	0
IAS 24	Related Party Disclosures	28	13
IAS 33	Earnings Per Share	4	6
IAS 36	Impairment of Assets	16	11
IAS 37	Provisions, Contingent Liabilities, and Contingent Assets	10	2
IFRS 8	Operating Segments	36	5
<b>Total</b>	<b>12 IAS/IFRS</b>	<b>216</b>	<b>105</b>

#### *4.4 Scoring and Weighting the Index*

##### *4.4.1 Measurement Instruments of Compliance: The Dichotomous Approach vs Partial Compliance Approach*

The chosen items (included in the index) can be weighted to mirror their importance to the researcher or the focus group (Vlachos, 2001). This thesis investigates the level of compliance with mandatory IFRS disclosure requirements. Mandatory disclosures yield necessary information for all users of financial statements and thus each mandatory disclosure is considered to have equal importance to the users (Boshnak, 2017). Hence, there is no need to assign weights to different items in the case of this thesis and the objectives it opts to achieve. This is because weighting items would highly depend on exercising subjective judgement in relation to the importance of an item (Vlachos, 2001). In line with the objectives of this thesis and the fact that it opts to study mandatory disclosure items, the researcher chose to use the unweighted procedure in line with previous studies which studied mandatory disclosures (Rahman et al., 2011; Boshnak, 2017). In line with similar studies undertaken in developed countries such as Tower et al. (1999), Street and Bryant (2000) and in developing countries: Al-Shammari et al. (2008), Alfaraih (2009), Hassaan (2013a; 2013b), Boshnak (2017), every disclosure item in the developed index will be given an identical weight in an unweighted approach. By this, the disclosure item is given a score of (1) if the company disclosed it and (0) if not, and (N/A) if it is not applicable to the entity concerned. This means that if the disclosure item is not applicable to the studied company, it is dropped from the firms score (Boshnak, 2017).

Tsalavoutas & Evans (2010) state that there are two unweighted approaches to measure compliance with IFRS mandatory disclosure requirements. These are the dichotomous approach (also known as Cooke's method) which is the most commonly

used approach, and the partial compliance (PC) unweighted approach. Tsalavoutas & Evans (2010) conducted a study to compare the two methods of measuring compliance with IFRS mandatory disclosure requirements on a sample of companies. Alongside others who studied both methods (eg: Abdullah & Minhat, 2013, Abdullah et al., 2015) the authors found that the two methods exhibit considerably different overall compliance scores (ranking orders). Hence, they suggest the simultaneous use of both methods whilst measuring compliance with IFRS mandatory disclosure requirements in order to reach concrete and robust results that will carry more informative findings. As such, this thesis will simultaneously employ both methods. Table 3 clarifies the measurement instruments used by each study of relative similarity to this thesis. Given the fact that most disclosure studies measure compliance with disclosure requirements by using Cooke's method (the dichotomous approach) with only a selected few focusing on partial compliance, this study aims to add to the literature which uses partial compliance to examine possible difference in results.

Table 3. Measurement Methods Used in Previous Studies

Study	Years studied	Country	Sample of listed entities	standards	# of items	Method
Street & Gray (2002)	1998	Global	279	12 IAS	-	Cooke's
Yeoh (2005)	1996 - 1998	New Zealand	49 non-financial	FRS's	495	Cooke's
Al-Shammari et al. (2008)	1996-2002	GCC	137	14 IAS	160	Cooke's
Taylor et al. (2008)	2005	Australia	30	FID	120	Cooke's
Al-Akra et al. (2010)	1996 – 2004	Jordan	80 non-financial	1996:19 2004: 31	1996: 301 2004: 641	Cooke's
Tsalavoutas (2011)	2005	Greece	153	31IAS/IFRS	481	Cooke's and PC
Abdullah & Minhat (2013)	2008	Malaysia	225	12 IFRS	295	Cooke's and PC
Hassaan (2013a)	2007	Jordan	75 non-financial	IFRS	275	Cooke's
Hassaan (2013b)	2007	Egypt	75 non-financial	IFRS	275	Cooke's
Aljifri et al (2014)	2005	UAE	153	IAS/IFRS	317	Cooke's
Abdullah et al. (2015)	2015	Malaysia	221	12 IFRS	295	PC
Ebrahim & Fattah (2015)	2007	Egypt	116	IAS 12 & EAS 24	N/A	Cooke's
Alfraih 2016	2010	Kuwait	132 non-financial	26 IFRS	439	Cooke's
Juhmani (2016)	2010	Bahrain	41	27 IFRS	224	Cooke's
AL-Sartawi et al (2017)	2015	Bahrain	39	IAS -1	N/A	Cooke's
Agyei-Mensah (2017)	2011-2013	Ghana	90	IFRS 7	-	Cooke's
Boshnak (2017)	2010-2013	GCC	392	24	325	Cooke's
Nalukenge et al. (2018)	2014	Uganda	85 microfinance institutions	15 IFRSs	-	Cooke's

#### 4.4.2 The Dichotomous Approach

The conventionally termed ‘unweighted approach’, ‘dichotomous’, or ‘Cooke’s’ method has been widely used in many previous studies that examined compliance with mandatory IFRS disclosure requirements (e.g. Cooke, 1992; Ahmed & Nicholls, 1994; Street & Bryant, 2000; Abd-Elsalam & Weetman, 2003; Glaum & Street, 2003; Yeoh, 2005; Hogdon, Tondkar, Harless & Adhikari, 2008). The dichotomous approach gives the individual items required to be disclosed by all standards equal weights; giving higher weights to those standards which require more items to be disclosed which will make them appear to be of higher importance than those with lower disclosure items (Al-Shiab, 2003). This method depicts that if a mandatory item is disclosed, it is given a score of 1; whereas if it is not disclosed, it would be scored as 0 or “N/A” if the item is not relevant to the firm (Tsalavoutas & Evans, 2010). The benefit of using such method in a complex study on compliance measurement is that a firm will not be penalized should it not have a certain item disclosed if the item was not relevant to it (Owusu-Ansah, 1998; Cooke, 1992; Abdullah & Minhat, 2013). As argued by Cooke (1989), this approach adds subjectivity to dichotomous methods. Nonetheless, not using this method may result in firms that are diversified to get higher disclosure scores than they usually would (Boshnak, 2017).

Each company is scored separately and is calculated as the ratio of total number of items disclosed to the maximum score possible (maximum possible number of items):

$$DCS_{qy} = \frac{T = \sum_{i=1}^M d_i}{M = \sum_{i=1}^n d_i}$$

Where:

$DCS_{qy}$ : Disclosure Compliance Score of company (q) for the year (y)

T: Total number of items disclosed by company (q)

M: maximum number of disclosure items which are applicable that could have been disclosed by company (q)

d= 1 if item is disclosed

d= 0 if item is not disclosed,

$DCS_{qy}$  (Disclosure Compliance Score) is the total compliance score for every company for the year (y);  $0 \leq DCS_q \leq 1$ . T is the number of total disclosed items ( $d_i$ ) of the company (q). M represents the maximum applicable items of which company (q) is anticipated to disclose. As previously mentioned, this thesis sets out to study the sample across three years, hence, the compliance score will be measured for each entity for the time period included in the thesis.

However, as argued by Tsalavoutas and Evans (2010), the dichotomous approach involves a weakness that the number of items required under different standards vary. Al-Shiab (2003) states that the result of applying an equal weight for each item would lead to a standard which entails more items to be disclosed as having higher importance than those standards with lower disclosure items. To elaborate further, some of the chosen standards (such as IAS 1) would entail a higher amount of items to be disclosed; whilst other standards (like IAS 2) involve a few disclosure items; hence, under the dichotomous approach, IAS 1 appears as having higher importance than IAS 2. Thus, standards which have more disclosure items included in the overall index are unintentionally treated unequally with those standards with a lesser amount of disclosure items (Al-Shiab, 2003). Therefore, Tsalavoutas & Evans (2010) state that



the application of the PC method simultaneously would conclude in more informative results. Consequently, this thesis also deploys the alternative method of PC.

### 3.4.3 The Partial Compliance Unweighted Approach (PC)

A number of studies used the partial compliance approach to avoid any probable bias contributed by the dichotomous approach. These included studies by Al-Shiab (2003, 2008), Tsalavoutas & Evans (2011), Abdullah & Minhat (2013) and Abdullah et al. (2015). The PC approach assumes each of the given items in the standards are of equal importance and hence gives each standard an equal weight. The scoring process under the PC approach is the same as the one used under the dichotomous method in the sense that they are both ‘unweighted’ (1 if the item is disclosed, 0 if not, and NA if not relevant) (Abdullah & Minhat, 2013). However, the factor differentiating the two measurement methods lies in the calculation of the total compliance score. Under the PC method, the ratio is calculated by summing the extent of compliance with each item under each standard and then this total is divided by sum of standards that are applicable to the company (Abdullah & Minhat, 2013), as in the formula depicted below:

$$PCS_{qy} = \frac{\sum_{i=1} X_i}{R_q}$$

Where:

$PCS_{qy}$ : Partial Compliance Score of company (q) for the year (y)

X: the compliance level with each standard

$R_q$ : total number of standards applicable to company q

$PC_{qy}$  is the total score of compliance for each firm (q) for year (y);  $0 \leq PCS_q \leq 1$ .  $X_i$  is the compliance level with mandatory disclosure requirements of each standard.  $R_q$  reflects the total number of standards applicable to company (q). In other words, the compliance with each standard's disclosure items is calculated separately. After that the total sum of compliance scores (X) is divided by the total number of standards applicable to each company ( $R_q$ ) (Tsalavoutas & Evans, 2010). This scoring approach alongside the dichotomous method is illustrated below.

#### *3.4.4 The Dichotomous Approach vs The Partial Compliance Approach Illustrated*

Based on a descriptive theoretical example used by Tsalavoutas and Evans (2010), the method of computing the scores of compliance according to each approach is computed as follows. Assuming company (X) complies with one item of the three disclosure items required under Standard A, two items of the five disclosure items of standard B, and complies with seven of the nine disclosure items required by standard C. The compliance score would differ under each approach in the set example. For the dichotomous approach, the compliance score is calculated as the sum of all items the company disclosed divided by the total number of items under all three standards:  $DCS = (10/17) = 0.59$  or 59%. Tsalavoutas & Evans (2010) further explain by showing the results under the PC unweighted approach as  $PCS = [(1/3) + (2/5) + (7/9)]/3 = 0.50$  or 50%. As seen, the PC approach takes into account the level of compliance with each standard. As explained by the authors, although there is a low level of compliance with the disclosure items in standards A and B, it is outweighed by the high compliance in standard C. This shows that the dichotomous approach may result in a misleading score which is affected by higher compliance with one standard (Tsalavoutas & Evans, 2010).

A second scenario would be to assume that the company shows a higher level of compliance in standards A and B, and a lower compliance with standard C; all three items in standard A and four items of the five in standard B, and only three out of the nine of standard C. The results would still be the same under the dichotomous approach  $DCS = (10/17) = 0.59$  or 59%. On the other hand, the score in this scenario would differ under the PC approach where  $PCS = [(3/3)+(4/5)+(3/9)/3] = 0.74$  or 74%. As stated by Tsalavoutas (2011), scores under Cooke's method are bound to be sensitive to the number of items by each standard included in the index. Hence, this would result in misleading conclusions on the level at which entities comply with disclosures. Tsalavoutas and Evans (2010) suggest the use of the PC method by research which choose to include standards with a wide range of required disclosure items as it would yield results which are less misleading. According to the authors, the PC approach aid the identification of standards that are not relevant to certain companies with comparable characteristics. Also, it permits the measurement of compliance with every standard on a separate basis which in return would allow for recognizing any clusters of non-compliance of specific standards that could be in correlation with other variables.

Since a majority of studies used the dichotomous approach and a selected few used the PC approach, it would be interesting to examine the results of compliance under both methods and how the effects of variables would translate onto compliance in both methods.

#### *3.4.5 Limitations of The Scoring Instruments*

Regardless of the method deployed to calculate the level of compliance with mandatory IFRS disclosure requirements, the researcher would need to use subjectivity to decide whether a required disclosure item is applicable to a company and if it was

complied with (Tsalavoutas & Evans, 2010). However, it is also worthy to state that the PC approach is considered more prone to the researcher's skills to give a score to more complicated standards.

#### *3.4.6 Validity of The Scoring Process*

Tsalavoutas & Evans (2010) state that the concept of reliability revolves around the measurements accuracy. In other words, it is how proper the concept examined is measured. However, it is vital to ensure the mitigation of uncertainties that may arise during the scoring procedure. Hence, this thesis follows a few steps consistent with previous similar studies:

1. After the researcher of this thesis built the index which included all mandatory disclosure items, the annual report of the firm is read fully and cautiously. According to Boshnak (2017), the reason for this step to be taken before scoring is to allow the researcher to apprehend the firms operations. This would allow for the avoidance of chastening those companies for not complying with mandatory disclosures of those standards (Cooke, 1992). This method was followed by Cooke (1989) and Boshnak (2017).
2. The figures of the chosen years disclosure item are crosschecked against its preceding and succeeding year. This is in line with approaches used by Wallace et al., (1994); Owusu-Ansah (1998, 2000); Rahman et al., (2011); Boshnak (2017).

#### *3.4.7 Reliability of The Scoring Instruments*

The concept of reliability revolves around how accurate the measurement is together with its stability, consistency, and precision (Tsalavoutas & Evans, 2010). In order to certify that the scoring methods as well as the index are reliable, a pilot scoring was done by an expert auditor on IFRS for 12 firms selected from the sample. This is

also done in similar studies (e.g. Owusu-Ansah, 1998; Abdullah et al., 2015).

#### 4.5 Research Model

This thesis opts to investigate the corporate governance factors, namely board characteristics and ownership structures, that may influence the extent of compliance with mandatory IAS/IFRS disclosure requirements. The research model of this thesis is summarized in Figure 1.

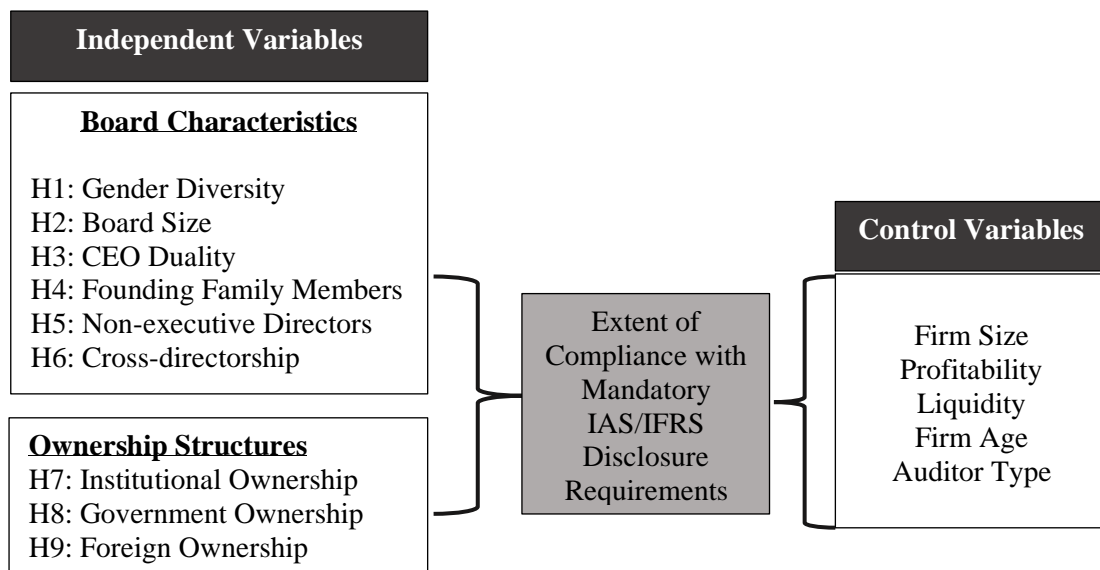


Figure 1. Research model

As highlighted in the prior section, the compliance with mandatory IAS/IFRS disclosure requirements is the dependent variable which will be examined through the use of a self-constructed index which includes all mandatory disclosure requirements applicable to the sample chosen and to the country setting of Qatar. To reach the percentage score which mirrors the level of compliance with mandatory disclosures, two scoring methods were used. These methods are Cooke's method which is also known as the dichotomous approach and the partial compliance method. Therefore, the research model will study the associations between the corporate governance mechanisms chosen and the extent of compliance with mandatory disclosures under

two sets of approaches. The chosen variables for this study are displayed in Table 4.

$$\begin{aligned} INDEX_{DCS} = & \beta_0 + \beta_1 FEMALE + \beta_2 SIZE + \beta_3 DUALITY + \beta_4 FM + \beta_5 NEXD + \\ & \beta_6 CRS + \beta_7 INST + \beta_8 GOV + \beta_9 FOREIGN + \beta_{10} FS + \beta_{11} ROA + \beta_{12} LQ + \\ & \beta_{13} FA + \beta_{14} AT + \varepsilon \end{aligned}$$

$$\begin{aligned} INDEX_{PCS} = & \beta_0 + \beta_1 FEMALE + \beta_2 SIZE + \beta_3 DUALITY + \beta_4 FM + \beta_5 NEXD + \\ & \beta_6 CRS + \beta_7 INST + \beta_8 GOV + \beta_9 FOREIGN + \beta_{10} FS + \beta_{11} ROA + \beta_{12} LQ + \\ & \beta_{13} FA + \beta_{14} AT + \varepsilon \end{aligned}$$

Where,

$INDEX_{DCS}$  = the mandatory disclosure index measured by the dichotomous approach

$INDEX_{PCS}$  = the mandatory disclosure index measure by the partial compliance approach.

Table 4. Operationalization of the Independent and Control Variables

Variable	Symbol	Operationalization	Source
<b>Board characteristics</b>			
Gender diversity	FEMALE	Dummy variable = 1 if a female is present on the board; and 0 otherwise	Alfraih (2016)
Board size	BSIZE	Total number of members on the board	Ebrahim & Fattah (2015); Alfraih (2016)
CEO duality	DUALITY	Dummy variable = 1 if the chairman of the board and the CEO are the by the same individual and = 0 otherwise	Ebrahim & Fattah (2015); Alfraih (2016)
Founding family members	FM	Dummy variable = 1 if there is at least one member of the founding family sits on the board	Ebrahim & Fattah (2015)
Non-executive Directors	NEXD	(Ratio) (number of independent members to total number of directors on the board)	Al-Akra et al.(2010); Ebrahim & Fattah (2015)
Cross-directorship	CRS	(Ratio) number of directors with cross directorships to total number of directors	Alfraih (2016)
<b>Ownership Structures</b>			
Government Ownership	GOV	Percentage of government owned shares	Ebrahim & Fattah (2015)
Institutional Ownership	INST	Percentage of shares owned by institutions	Agyei-Mensah (2017)
Foreign Ownership	FOREIGN	Percentage of foreign owned shares	Al-Akra et al. (2010)
<b>Control variables</b>			
Firm size	FS	Natural log of total assets	Alfraih (2016)
Profitability	ROA	The return on assets	Agyei-Mensah (2017)
Liquidity	LQ	Natural log of current ratio	Vlachos (2001)
Firm age	FA	Number of years the company has operated	Alfraih (2016)
Auditor type	AT	Dummy variable = 1, if Big 4; Dummy variable = 0, if not	Al-Sartawi et al. (2016)

To conclude, this chapter highlighted the several data collection methods for each of the concerned variables in this study. This study is longitudinal since it investigates the same sample across several years; the years of 2015, 2016, and 2017. The sample selected for this study were 24 listed non-financial firms for every year in

this study, leading to a total sample of 72 annual reports examined. The construction of the mandatory index alongside the validity and reliability measures taken were underlined. Likewise, the scoring process of the 216 items in the mandatory index were done so by using two different measurement instruments, the dichotomous approach and partial compliance approach. The differences amongst these methods and their reliability tests were also highlighted in this chapter. Finally, this chapter concludes with the research models used under both compliance scoring methods.



## **Chapter 5: Results and Analysis**

This chapter will be divided into several parts. The descriptive statistics section will display descriptive results for the dependent variable (under the two scoring methods) and the independent variables. The second part of the results chapter will document the results of Pearson's correlation, normality tests, and multicollinearity tests. The third section of this chapter will highlight the multiple linear regression results where the results will be discussed by comparing between the results of the dependent variable under the dichotomous scoring method and partial compliance method.

### *5.1 Descriptive Statistics*

#### *5.1.1 Dependent Variable: Mandatory Disclosure Index*

The dependent variable in this thesis is the extent of compliance with mandatory IAS/IFRS disclosure requirements. The score of compliance is reached by measuring it under two methods, the dichotomous approach and the partial compliance approach leading to the Disclosure Compliance Score (DCS) and Partial Compliance Score (PCS). As previously discussed in chapter 4, the dichotomous scoring method sums the total number of items disclosed by an entity and divides it by the total applicable items to that entity. The partial compliance approach is detailed in the sense that it calculates the compliance with each standard and divides it by the total number of standards rather than items. For example, the total number items disclosed under standard A divided by the total number of applicable items in standard A. The result of the aforementioned will then be divided by the total number of standards applicable to that company. Appendices B, C, D show the results of calculating the extent of compliance with mandatory IAS/IFRS items under the dichotomous scoring method for the years of 2015, 2016 and 2017, respectively. Appendices E, F, and G show the end results under

the partial compliance calculation method for the years 2015, 2016 and 2017, respectively.

Table 5 portrays the final results reached for each entity after conducting the scoring process under the two methods included in this study; dichotomous and partial compliance. The results reflect the extent of compliance by each entity (each entity was given a number) over the years for each method. The extent of compliance with mandatory IAS/IFRS disclosure under the dichotomous scoring method portrays an average score of 85% for 2015, and 87% for both 2016 and 2017. Meanwhile, the extent of compliance with mandatory IAS/IFRS disclosure under the partial compliance score is at an average of 73%, 81% and 80% for the years of 2015, 2016, and 2017, respectively. These results are consistent with the findings of studies which used both methods to score the index, where the dichotomous approach generated higher results. Tsalavoutas & Evans (2010) found that the dichotomous method led to higher scores of compliance in their sample which they state could result in deceptive views on the degree of companies compliance with accounting standards disclosure requirements. Also, the results donated to the literature by Street & Gray (2001), Tsalavoutas & Evans (2010) prove the concern above and the importance of applying both methods. The documented outcomes of their results indicate the presence of different compliance scores under each method.

To put it into perspective, company (1) in this thesis had compliance scores under the dichotomous method of 86%, 87%, 85% over 2015, 2016, and 2017, respectively. Company (1) had scores of 85%, 92% and 90% over 2015, 2016 and 2017 respectively under the partial compliance method. The eminent difference was because the PCS took into consideration company (1)'s improved compliance with some of the standards and items applicable to it, as opposed to the DCS which takes the wholesome

number of items disclosed, disregarding probable compliance changes within the standards themselves.

Table 5. Extent of Compliance Under DCS and PCS Methods

Company #	DCS			Company #	PCS		
	2015	2016	2017		2015	2016	2017
1	86%	87%	85%	1	85%	92%	90%
2	84%	85%	84%	2	70%	72%	87%
3	89%	91%	88%	3	91%	98%	98%
4	84%	86%	87%	4	72%	85%	73%
5	87%	90%	91%	5	85%	93%	94%
6	89%	92%	92%	6	77%	86%	77%
7	80%	84%	84%	7	69%	78%	78%
8	72%	72%	74%	8	63%	65%	70%
9	90%	93%	95%	9	96%	87%	89%
10	83%	86%	86%	10	60%	68%	68%
11	90%	95%	94%	11	62%	73%	73%
12	78%	81%	82%	12	68%	76%	76%
13	89%	92%	92%	13	38%	46%	46%
14	75%	79%	80%	14	49%	58%	60%
15	88%	92%	91%	15	67%	95%	85%
16	84%	87%	88%	16	83%	90%	92%
17	90%	91%	91%	17	69%	77%	76%
18	81%	82%	82%	18	84%	90%	90%
19	86%	88%	88%	19	83%	92%	92%
20	83%	86%	86%	20	88%	89%	88%
21	89%	92%	92%	21	78%	86%	86%
22	89%	92%	93%	22	66%	74%	75%
23	81%	86%	85%	23	74%	87%	66%
24	86%	86%	89%	24	75%	81%	84%
Mean	85%	87%	87%	Mean	73%	81%	80%
Max.	90%	95%	95%	Maximum	96%	98%	98%
Min.	72%	72%	74%	Minimum	38%	46%	46%
<b>Total Sample Score</b>		<b>86%</b>		<b>Total Sample Score</b>		<b>78%</b>	

However, it is extremely vital to note that the abovementioned discussion is to illustrate the importance of conducting both scoring methods and the differences they hold. This thesis does not attempt to study the improvements or differences in

compliance levels over the sample years. These results are merely an explanatory illustration. Instead, this thesis takes into account the total average compliance score of each method for all three years as shown in Table 6.

Table 6. Descriptive Statistics of the Variables

Dependent Variable	N=72	Minimum	Maximum	Mean	SD
<i>Panel A: Dependent Variable (INDEX) Both scoring methods</i>					
DCS		0.72	0.95	0.86	0.05
PCS		0.38	0.98	0.78	0.13
Independent Variables	N=72	Minimum	Maximum	Mean	SD
<i>Panel B: Continuous variables</i>					
Board Size (BSIZE)		5	11	8.50	1.70
Non-Executive (NEXD) Directors		0.67	1	0.93	0.08
Cross directorship (CRS)		0	0.83	0.22	0.19
Institutional ownership (INST)		0	0.77	0.24	0.25
Government ownership (GOV)		0	1	0.11	0.26
Foreign ownership (FOREIGN)		0	1	0.21	0.33
<i>Panel C: Dummy Variables</i>				Yes	%
Female member (FEMALE)				10	13.9
CEO duality (DUALITY)				8	11.1
Family members (FM)				12	16.7
Control Variables		Minimum	Maximum	Mean	SD
<i>Panel D: Continuous variables</i>					
Firm Size (FS)		20.07	25.27	22.78	1.25
Profitability (ROA)		-0.07	0.18	0.0638	0.04518
Liquidity (LQ)		-0.68	2.37	0.7048	0.61714
Firm Age (FA)		2.00	67.00	21.12	16.78
<i>Panel E: Dummy variables</i>				Yes	%
Auditor Type (AT)				68	94.4

In Table 6 Panel A shows the descriptive statistics of the self-constructed disclosure index (INDEX) in relation to the results under both scoring methods. The results depicted are for the total sample size as opposed to each individual year. For the

sample of 72 listed non-financial entities, the average levels of compliance with mandatory IAS/IFRS disclosure requirements was 0.86 or 86% under the DCS and 0.78 or 78% under the PCS. Tsalavoutas (2011) found a compliance score of 83% under the dichotomous approach and 79% under partial compliance. Street and Gray (2002) found a total score of 74% under the dichotomous score and 72% under partial compliance. Likewise, Abdullah & Minhat (2013) found scores of 89% by the dichotomous scoring method and 84% by the partial compliance approach. Tsalavoutas (2011) states that findings as such portray the level of sensitivity in the scores when the dichotomous method is used as a result of the number of items required under each standard. Therefore, it is safe to denote that the dichotomous approach generates a higher compliance score than the partial compliance approach for allocating more weight to those standards that require more disclosures (Abdullah & Minhat, 2013).

The differences among the illustrated results above explain the differences between the two scoring methods. The DCS shows little to no change over the years. This is because the DCS consists of summing the whole number of disclosed items and dividing it by the total number of applicable items, ignoring possible compliance differences within each standard every year. In other words, standards are treated unequally where standards with more items are assumed to have higher importance than those with a lower number of items. This leads to the obscuration of low compliance with one standard by higher compliance with another, dismissing the actual extent of compliance with one standard. Ultimately, birthing similar results over the years. On the other hand, the PCS measures the level of compliance with each standard under examination, which ultimately treats all standards fairly.

### *5.1.2 Independent Variables: Board Characteristics and Ownership Structures*

The independent variables for the study were either continuous or binary (dummy) variables as shown under Panel B of Table 6. The size of the board (BSIZE) had a minimum of 5 members, maximum of 11 members and 8 members on average. The table also presents that the highest ratio of non-executive directors within the sample was 1; indicating that some of the companies have a board with only non-executive members. Moreover, cross directorships were eminent in the sample with an evident maximum of 83% and an average of 22% of board members on one entity sitting on other boards. The descriptive statistics also show that there were 10 females present on the board in the sample studied. This shows that across the 24 non-financial companies chosen for this study only 13.9% of the boards were females in the time period of 2015 to 2017 of the sample. Also, there were 8 cases of CEO duality in the sample over the years. Finally, it was reported that there were 12 cases of presence of founding family members on the board of directors

### *5.1.3 Control Variables*

Descriptive statistics for the control variables are shown in Panel D and E. Panel D depicts the results for the continuous variables which shows the average firm size in the sample calculated by the natural log of total assets was 23. The average profitability of the firms in the sample was 0.0638 or 6.38% and a maximum of 0.18 or 18%. Moreover, Liquidity was at an average of 0.7048 and the average firm age was 21 years. Finally, Panel E portrays the descriptive statistic of the type of auditor where 68 firms from the sample used a Big 4 firm which is 94.4% of the sample.

## *5.2 Correlation*

Presence of high correlation between variables may cause an issue of multicollinearity and in return will affect the model's reliability (Acock, 2008).

Consequently, investigating the correlation between independent variables is vital (Tabachnick, Fidell & Ullman, 2007). In order to conduct the correlation between the variables, the Pearson's correlation is used. This has been used in disclosure studies by Hassaan (2013a, 2013b), Alfraih (2016), and Boshnak (2017), amongst others. The matrix examines the linear relationship between the variables in this study. Pearson's correlation matrix is presented in Table 7 below.

Table 7. Pearsons Correlation

	DCS	PCS	FEMALE	BFSIZE	DUALITY	FM	NEXD	CRS	INST	GOV	FOREIGN	FS	ROA	LQ	FA	$\bar{A}$
DCS	1															
PCS	.276*	1														
FEMALE	-.283*	-0.124	1													
BFSIZE	-0.195	0.135	-0.119	1												
DUALITY	.238*	.264*	-0.142	0.105	1											
FM	0.081	.325**	.251*	.242*	0.198	1										
NEXD	-	.313**	0.203	0.067	0.156	-0.227	-0.087	1								
CRS	0.159	-0.044	-.311**	-0.167	-0.155	.403**	0.115	1								
INST	.356**	0.161	-0.124	-0.09	0.133	-0.082	-0.01	0.051	1							
GOV	.270*	-0.069	-0.172	-0.094	0.221	-0.196	0.118	0.209	.569**	1						
FOREIGN	-.285*	-.247*	-0.098	0.035	-0.025	-0.057	0.026	-0.05	.477**	-0.224	1					
FS	.289*	0.23	-0.019	0.056	0.059	0.026	0.063	.251*	.558**	.372**	-0.188	1				
ROA	-0.224	-0.083	-0.08	-0.055	0.09	-0.158	0.09	0.084	-0.093	0.037	0.126	-.371**	1			
LQ	0.145	-0.147	0.004	-0.225	.311**	0.011	-0.12	-0.02	.280*	.431**	0.045	0.087	.473**	1		
FA	-0.195	0.108	-0.032	.562**	0.066	0.124	0.182	0.012	-0.167	-0.077	-0.113	-0.028	0.134	0.136	1	
AT	.241*	0.051	0.097	0.036	-0.107	0.108	0.096	0.073	-0.042	-0.066	0.122	0.047	.313**	-0.15	0.024	:

\* Correlation is significant at the 0.05 level (2-tailed).

\*\* Correlation is significant at the 0.01 level (2-tailed).



In order to ensure that this study is not prone to multicollinearity issues, Variance Inflation Factors (VIF) were examined and documented no concerning correlations. Field (2009) and Pallant (2013) state that concerns should be heightened when the VIF is greater than 10. Table 8 depicts that VIF for all variables are below 10. Another indicator of multicollinearity is the tolerance level. Weisburd and Britt (2007) denote that any figure below 0.20 suggests serious multicollinearity. All variables show a tolerance level over 0.2 with the lowest level of tolerance being 0.34 and the highest at 0.834. Hence, multicollinearity is not an issue of concern in this study.

Table 8. Multicollinearity Statistics

Independent Variable	Tolerance	VIF
Female Members (FEMALE)	0.72	1.388
Board Size (BSIZE)	0.482	2.074
CEO duality (DUALITY)	0.736	1.359
Members of the founding family (FM)	0.646	1.548
Non-executive directors (NEXD)	0.671	1.49
Cross directorship (CRS)	0.595	1.682
Institutional ownership (INST)	0.34	2.945
Government ownership (GOV)	0.522	1.914
Foreign ownership (FOREIGN)	0.571	1.752
Firm size (FS)	0.44	2.273
Profitability (ROA)	0.439	2.279
Liquidity (LQ)	0.455	2.2
Firm age (FA)	0.462	2.163
Auditor type (AT)	0.834	1.2

It is vital to check for normality amongst the continuous variables chosen to be studied in this thesis. The normality tests run were by P-P plots as well as numeric tests: skewness and Kurtosis. Frequency distributions ‘Probability – Probability’ plots (P-P plots) are a good choice to show the whole distribution shape. P-P plots is considered a

useful plot to check for normality (Field, 2013). These were conducted twice; once for each model in this study, DCS and PCS results. These frequency distributions are found in Appendix H. With reference to both P-P plots, normality can be assumed as there appear to be no drastic deviations from the normality line.

In order to ensure numeric normality, tests were also run on the continuous variables used in this thesis. Table 9 highlights all those continuous variables excluding female members, members from the founding family, CEO duality, and auditor type as these were binary variables. The normality tests made were skewness, which indicates lack of symmetry, and kurtosis which shows pointiness (Field, 2013).

Table 9. Numerical Results of Normality Tests

Variable	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Board size ( <i>BFSIZE</i> )	-0.106	0.283	-1.087	0.559
Non-Executive directors ( <i>NEXD</i> )	-0.818	0.283	0.165	0.559
Cross directorship ( <i>CRS</i> )	1.156	0.283	1.754	0.559
Institutional ownership ( <i>INST</i> )	0.722	0.283	-0.818	0.559
Government ownership ( <i>GOV</i> )	2.241	0.283	3.784	0.559
Foreign ownership ( <i>FOREIGN</i> )	1.562	0.283	0.69	0.559
Firm size ( <i>FS</i> )	-0.09	0.283	-0.617	0.559
Profitability ( <i>ROA</i> )	-0.035	0.283	0.792	0.559
Liquidity ( <i>LQ</i> )	0.826	0.283	1.18	0.559
Firm age ( <i>FA</i> )	1.559	0.283	1.307	0.559

#### 5.4 Regression Analysis

This thesis aims to investigate the extent of compliance with mandatory IAS/IFRS disclosures and the corporate governance factors which influence it, namely: board characteristics and ownership structures. Therefore, the best regression to accomplish this objective given the multiple variables present is the multiple regression

model. This approach was used by many extant studies (e.g.: Al-Akra et al., 2010; Boshnak, 2017). The results highlighted in Table 10 and in the upcoming section will include both models studied in this thesis. Each model consists of the same independent and control variables but differs in the dependent variables' outcome. The dependent variable is the extent of compliance with mandatory disclosure requirements and is measured by the dichotomous approach and partial compliance approach. Therefore, the hypotheses will be interpreted under both results of the dependent variables.

Table 10. Multiple Regression Results Under Both Compliance Scoring Methods

Variable	Unstandardized Coefficients B	Standardized Coefficients Beta	DCS sig.	Unstandardized Coefficients B	Standardized Coefficients Beta	PCS sig.
(Constant)	0.807		0	-0.204		0.56
FEMALE	-0.054	-0.361	0.001** *	-0.077	-0.207	0.081*
BFSIZE	-0.002	-0.072	0.582	-0.015	-0.198	0.169
DUALITY	0.021	0.126	0.239	0.142	0.345	0.004** *
FM	0.016	0.113	0.32	0.133	0.384	0.003** *
NEXD	-0.183	-0.274	0.016**	0.54	0.322	0.01**
CRS	0.005	0.018	0.879	0.06	0.087	0.5
INST	-0.014	-0.068	0.664	0.059	0.113	0.509
GOV	-0.002	-0.011	0.933	-0.075	-0.15	0.277
FOREIGN	-0.059	-0.379	0.002** *	-0.065	-0.166	0.209
FS	0.009	0.226	0.102	0.022	0.211	0.163
ROA	-0.009	-0.008	0.955	0.481	0.167	0.267
LQ	0.007	0.089	0.508	-0.06	-0.283	0.058
FA	-0.001	-0.281	0.039	0.001	0.132	0.367
AT	0.068	0.305	0.003	0.069	0.122	0.263
$R^2$			0.534			0.443
Adjusted $R^2$			0.419			0.306

Notes: \* significant at 0.1, \*\* significant at 0.05, \*\*\* significant at 0.01

### *5.5 Discussion of the Results*

Table 10 above highlights the results of the multiple regression conducted to reach the objective of this study. It highlights two columns portraying the significance levels under the two scoring methods used, the Dichotomous Compliance Score (DCS) and the Partial Compliance Score (PCS). The adjusted R square was 0.419 under the DCS model, which implied that 41.9% of the mandatory disclosure index variation is explained by the independent variables examined in this study. Furthermore, the adjusted R square under the PCS model depicts that a total of 30.6% of the dependent mandatory disclosure index variable is explained by the independent variables.

H1 of this thesis study predicted no association between the presence of females on the board of directors and the level of compliance with mandatory IAS/IFRS disclosure requirements. The results in Table 10 show that the variable of female members on the board is significantly negatively correlated to the level of compliance with mandatory IAS/IFRS disclosure under the DCS ( $P < 0.01$ ). This result is inconsistent with findings of similar studies which used the dichotomous scoring method for their indices in the region where Alfraih (2016) found a significant positive correlation between female members on the board and compliance with mandatory disclosures. Likewise, presence of female members on the board was found to have a significant negative correlation ( $P < 0.10$ ) with the level of compliance with mandatory disclosures under the partial compliance method. Therefore, the presence of female members on the board is negatively associated with the extent of compliance with Mandatory IAS/IFRS disclosure requirements in the State of Qatar for the sample. An explanation for this negative relationship could be deduced from the lack of a specific law in Qatar requiring female members on boards. Hence, if there were laws requiring presence of females on the board, the result documented from the sample may be

eminently different.

A larger number of members on the board is often argued to impair the effectiveness of the board to make timely strategic decisions as a result of possible communication and coordination issues. However, it is also argued that a larger board size brings diverse expertise to the board which translates into higher financial compliance. Therefore, this study assumed no relationship between board size and the level of compliance with mandatory IAS/IFRS disclosure requirements to investigate the direction of this variable. The results of the regression depict that there is no significant correlation between the size of the board and compliance with mandatory disclosures under the dichotomous score for listed non-financial entities in Qatar. Opposite to the proposition by John and Senbet (1998), it can be denoted that the size of the board may not be an efficient intermediate to the agency problem born from conflicts of interest. This result is inconsistent with prior studies that used the dichotomous scoring methods. Alfraih (2016) found that board size has a significant positive correlation with the levels of compliance with mandatory disclosures. Similarly, the results of the regression under the PCS shows that there is no significant relationship between the variable of board size and the extent of compliance with mandatory IAS/IFRS disclosures. Therefore, a large number of members on the board of directors in Qatari listed non-financial entities would not necessarily translate into better degrees of compliance with IAS/IFRS disclosure requirements.

Combining the roles of the CEO and the Chairman would give power to a single individual and obstruct the process of monitoring the companies' management. H3 assumes no association between CEO duality and the level of compliance with mandatory disclosures. Referring to Table 10, CEO duality had no significant impact on the level of compliance with disclosures under the dichotomous scoring method.

This is in line with findings by Hassaan (2013b). Contrary to the assumption of H3, CEO duality was found to have a positive and significant correlation with the extent of compliance with mandatory disclosures under the PCS model ( $P < 0.01$ ). However, the results illustrated by both models are inconsistent with most prior studies which found that CEO duality would negatively impact levels of disclosures (e.g. Huafang & Jianguo, 2007; Alfraih, 2016).

It is widely conceived that family members can influence the disclosures made by their companies to the public. Furthermore, boards of family firms would be less likely to comply with mandatory disclosures (Abdullah et al., 2015). However, Floros et al. (2008) states that family firms reduce agency costs. As a result of the mixed advantages and disadvantages of family members being associated in the daily managerial activities of their firms, H4 predicts no association between the presence of founding family members on the board and the extent of compliance with mandatory IAS/IFRS disclosures. Under the results of the DCS, it is seen that there is no significant impact of having a member of the founding family present on the board on the level of compliance with mandatory IAS/IFRS disclosure requirements. This result is inconsistent with prior studies that used the dichotomous approach and find that family members do in fact have a negative correlation to disclosures (Ho & Wong, 2001; Mohamed & Sulong, 2010; Alfraih, 2016). H4 is not accepted under the results of the PCS model as it documents a positive and significant correlation with the level of compliance with mandatory IAS/IFRS disclosure requirements ( $P < 0.01$ ). This means that the larger number of founding family members on the board in listed entities in Qatar, the higher the level of compliance with mandatory IAS/IFRS disclosure requirements. This is in line with results by Alanezi and Albuloushi (2011) and Ebrahim and Fattah (2015) who find a significant positive association between family members

on the board and compliance with disclosures. Reasons pertaining to this finding might be because family members on the board aim to keep and build a sound reputation for their family business in the market.

H5 expects that there is no association between the proportion of non-executive directors present on the board and the level of compliance with mandatory IAS/IFRS disclosure requirements. The results of the DCS model depict that the relationship between the proportion of non-executive directors on the board and level of compliance with disclosures is significantly negative ( $P < 0.05$ ), rejecting H5. This coincides with the findings of Eng & Mak (2003) who document a significant negative effect of this variable on disclosures in Singapore. Contrary to the abovementioned results of the DCS model and in support of H5, the PCS model results portray a significant and positive correlation between the proportion of non-executive directors and the extent of compliance with mandatory IAS/IFRS disclosures ( $P < 0.05$ ). The agency theory states that the existence of independent non-executive directors reduces chances of information asymmetry (Porta et al., 2002). Also, increasing the proportion of independent members on the board reduces agency costs and conflicts of interest (Mobbs, 2013). Therefore, the result found under the PCS approach supports the assumption of the agency theory and is in line with results found by Chen and Jaggi (2000), Agyei-Mensah (2017), Boshnak (2017). This correlation may have resulted as most of the GCC firms use board independence and non-executive directors to maximize the ability of the boards' enforcement of meeting disclosure requirements (Haniffa & Cooke, 2002; Boshnak, 2017).

It is widely believed that members of the board also sitting on other boards would more likely be absent from board meetings, be less active and less independent. However, it is also depicted that cross-directorship brings a wide range of expertise

which benefits the level of compliance within a firm. Therefore, this study assumes that there is no association between the presence of a board member on another board of a listed firm and the extent of compliance with mandatory IAS/IFRS disclosures. In line with this prediction, the result under the DCS model shows no significant impact of this variable on the extent of compliance with mandatory IAS/IFRS disclosures. Likewise, the result under the PCS model portrays the same result. Hence, although it was found that a large proportion of the sample had board members sitting on other boards in listed firms in Qatar, it is not supported that this would have an impact on the level of compliance with mandatory IAS/IFRS disclosures.

One of the corporate governance mechanisms characterized by utmost importance is ownership. Ownership structure variables studied in this study are institutional, government and foreign ownership. H7 assumes no association between the extent of institutional ownership and the extent of compliance with IAS/IFRS disclosures. The result under the DCS model shows a negative yet insignificant correlation between this factor and the extent of compliance. Likewise, the PCS model also draws results of institutional ownership having no significant impact on compliance with mandatory IAS/IFRS disclosure requirements. These results are in line with the results of studies by (Al-Shammari et al., 2008; Al-Akra et al., 2010).

H8 predicts no association between government ownership and the extent of compliance with mandatory disclosures. Both the DCS and PCS models show a negative yet insignificant association between this variable and the extent of compliance. The result is consistent with Naser et al. (2002), Hassaan (2013b) and Juhmani (2017). This in fact indicates that whether or not the local government owns shares in listed entities, this will not translate into higher or lower levels of compliance with mandatory IAS/IFRS disclosures in Qatar.



Lastly, this thesis hypothesized that foreign ownership would have no correlation with the extent of compliance with mandatory IAS/IFRS disclosure requirements. The result under the DCS model leads to rejecting the hypothesized assumption where foreign ownership is found to have a significant negative correlation with the extent of compliance with disclosures ( $P < 0.01$ ). In line with the predicted hypothesis, there was no significant relationship between foreign ownership and the extent of compliance with mandatory IAS/IFRS disclosures under the partial compliance approach. This is consistent with Naser et al. (2002), Crowley (2011), Aljifri et al. (2014) and Hassan (2015). Therefore it can be presumed that in Qatar, listed non-financial entities are not affected by the base theories of capital need to comply more with disclosure to attract more foreign investors.

In support of the findings of Street and Gray (2002) and Abdullah and Minhat (2013), the partial compliance and dichotomous methods for measuring the level of compliance produce different scores. Street and Gray (2002) found that industry type is significantly correlated with the compliance score under the partial compliance approach, but has no significant relationship under the dichotomous approach. Consistent with the different results found amongst variables under the two difference scores as shown in Table 11.

Table 11. Summary of Results

Variable	Hypothesis No.	Predicted Relationship	Results DCS	Results PCS
Female Presence	H1	No relationship	(-)	(-)
Board Size	H2	No relationship	Supported	Supported
CEO Duality	H3	No relationship	Supported	(+)
Family members	H4	No relationship	Supported	(+)
Non-executive directors	H5	No relationship	(-)	(+)
Cross directorship	H6	No relationship	Supported	Supported
Institutional ownership	H7	No relationship	Supported	Supported
Government ownership	H8	No relationship	Supported	Supported
Foreign ownership	H9	No relationship	(-)	Supported

To conclude, this chapter highlighted several results. Firstly, it highlighted the descriptive statistics associated with the dependent variable which is the mandatory disclosure index. It shed a light on the compliance scores under the two different methods used, the dichotomous and partial compliance approach which documented two different results in line with many previous studies that examined both methods. Furthermore, this chapter shed a light on the descriptive statistics of the independent variables used in this thesis as well as the Pearson Correlation matrix. Additionally, this chapter evidenced that multicollinearity is of no issue to the study at hand. Lastly, the multiple regression model results were discussed in the light of both scoring methods used. The results highlight the differences in compliance under the two methods and how independent variables correlate differently to the extent of compliance with mandatory IAS/IFRS disclosures under different compliance scores. Most of the hypotheses of this study were found to have no significant relationship with the dependent variable, where only five were evidently found to have an association: the presence of female members on the board, the proportion of non-executive directors

and foreign ownership are negatively correlated to the level of compliance with mandatory IAS/IFRS disclosure requirements. Additionally, CEO duality, the presence of members of the founding family on the board and non-executive directors were found to be positively associated with the level of compliance with mandatory IAS/IFRS disclosure requirements.

The differences in empirical results from running the regression in the light of two different disclosure scores raises interests as well as concerns on the empirical results concluded by prior studies which only used the dichotomous approach. A fact to bear in mind is that the results of the dichotomous scoring method unfairly scores standards and thus, are inclined to be more biased towards higher compliance scores. Hence, empirically investigating disclosures under both methods is of particular importance in future research.

## **Chapter 6: Conclusions**

Interconnectivity of the global business market in the present day alongside the heightened calls for financial disclosure transparency in the era of increased financial fraud eminently led to the adoption of best practices in accounting. Those best practices are highlighted under the set of guidelines to be followed called the IFRS, previously IAS. However, these best practices could not be implemented in organizations that lack proper corporate governance structures and factors. These corporate governance structures are believed to have four contributing factors to their succession: ownership structures, board structures (board characteristics), financial data transparency and audit committees (Dahawy, 2009). Three of those vital mechanisms were the essence of this study.

This thesis sets out to examine the extent of compliance with mandatory IAS/IFRS disclosure requirements and the factors of corporate governance which affect it, namely: board characteristics and ownership structures. In that context, this thesis does not intend to focus on the relevance of the accounting disclosures made to users but on whether or not listed entities comply with disclosing those items on their reports. Moreover, this thesis chose to examine this topic in the country setting of Qatar as it is a vastly developing country devoted to become a lead player in international markets. Also, this thesis was highly motivated by the urge to study the improved corporate governance mechanisms realized in the country. Another motivation was to contribute to the extant literature on the topic at hand as it was merely touched in the context of Qatar in terms of corporate governance factors and mandatory IAS/IFRS disclosures. Furthermore, this study was motivated by the lack of empirical evidence by the use of the partial compliance approach in the global arena.

In reference to the results of various extant studies on the topic at hand, laws conveyed in the country and theoretical grounds, nine hypotheses were generated, six relating to board size and three to ownership structures. The board characteristics examined included gender diversity, board size, CEO duality, founding family members on the board, proportion of non-executive directors, and cross (multiple) directorships. The ownership structure variables chosen in this thesis were institutional, government, and foreign ownership. In order to reach the objectives of this thesis, a sample size of 72 annual reports from 24 listed non-financial entities in Qatar for the years of 2015, 2016, and 2017 were chosen to be investigated.

The level of compliance with mandatory IAS/IFRS disclosure requirements was operationalized by self-constructing a disclosure index consisting of 216 mandatory IAS/IFRS disclosure items from 12 different selected IAS/IFRS standards in the country setting of Qatar and the listed non-financial entities in the sample. In order to score this index and reach a score or 'level' of compliance, two scoring instruments were used. Firstly, the widely used dichotomous approach was used in this paper. The second instrument is the partial compliance approach. To the best of the researcher's knowledge, the latter was not studied in the context of Qatar. The scoring methods under both approaches gave unweighted scores to each item, (1) if it was disclosed, (0) if not, and (N/A) if it is not applicable to that certain entity. After careful scrutiny of the annual reports of each entity, each disclosure item was scored accordingly, leading to a final score under both methods for each entity. These scores were later combined with the scores of all other entities (72) for both methods. The compliance score under both methods illustrated a total compliance score under 86% under the DCS and 78% under the PCS. This answers the first objective set in this thesis which was to find the level of compliance with mandatory IAS/IFRS disclosure requirements in Qatar.

To further examine the influence of the independent variables on the compliance with mandatory IAS/IFRS disclosure requirements (which was represented by two different scores), a multiple regression was conducted. The empirical evidence led to the rejection of most hypotheses except three: presence of females on the board, the proportion of non-executive directors and foreign ownership are negatively associated with the level of compliance with mandatory IAS/IFRS disclosure requirements under the dichotomous approach. However, presence of females on the board was also found to have a significant negative correlation with the level of compliance with mandatory IAS/IFRS disclosure requirements under the partial compliance approach. All other results of the regression portrayed mixed results for each scoring method.

The variables of board size, cross directorships, institutional ownerships, and government ownerships were found to have no significant effect on the extent of compliance with mandatory IAS/IFRS disclosure requirements in Qatari listed non-financial entities under both scoring methods. Discrepancies in results appeared in the variables of CEO duality and presence of founding family members on the board which were both not significant under the dichotomous method but were positively correlated to the extent of compliance with IAS/IFRS disclosures under the partial compliance method. The proportion of non-executive directors was positively correlated with the extent of compliance with IAS/IFRS disclosure requirements under the partial compliance approach. Lastly, foreign ownership was found to have no significant association with the level of compliance with mandatory IAS/IFRS disclosure requirements under the partial compliance approach.

The results of this thesis paper shed a light on the importance of carrying out compliance studies under the two measurement methods and more likely under the partial compliance method. This is because the partial compliance approach in

measuring compliance allocates similar weights to all chosen standards where it would generate conservative scores and is considered a more fair method for purposes pertaining to regulation (Abdullah & Minhat, 2013). Whereas under the dichotomous approach, they are quite misleading. In line with the argument set forth with Tsalavoutas (2011), results documented by previous studies are biased toward higher compliance as they solely relied on the dichotomous scoring method. The findings of this thesis depict the possible need to consider raising questions on the results documented by similar previous studies which investigated the matter by Cooke's dichotomous approach. It also raises questions of interest whether the results documented in extant studies have reflected different outcomes should the authors have undertaken the partial compliance method. Therefore, the second and third objectives from the onset of this paper: do board characteristics affect the level of compliance with mandatory IAS/IFRS disclosures? Yes, but only gender diversity, CEO duality, presence of founding family members on the board, and non-executive directors. The third research objective was to find whether ownership structures affect the level of compliance with mandatory IAS/IFRS disclosures and as it was eminent in the results, only foreign ownership does.

There are various limitations to this study. Initially, adequate information for the variables pertaining to ownership structures are not available in annual reports and are absent in most governance reports of several listed entities. Furthermore, the results of this paper are not generalizable to financial entities and entities excluded from the sample that are listed on the Qatar Stock Exchange or in neighboring countries since it focuses only on listed non-financial entities in Qatar. Also, both scoring methods used in this thesis required subjectivity, and this subjectivity as stated by Owusu-Ansah (1998), is unavoidable.

Regardless of its limitations, this study generated results which could have several implications. Regulators and enforcement bodies could benefit from this study by viewing how corporate governance mechanisms such as board and ownership structures could affect an entity's compliance with mandatory IAS/IFRS disclosure requirements and implementing stricter regulations on these factors. Additionally, these parties alongside auditors could gain an insight on the overall degrees of compliance with mandatory IAS/IFRS disclosure requirements in the country for the years of 2015, 2016 and 2017. Moreover, boards, stakeholders and especially investors could benefit from the findings of this study as it sheds a light on how a possible characteristic eminent in an entity could impact the disclosures they see in annual or financial reports. In the same vein, the results documented in this thesis underline the positive impacts of separating the roles of the CEO and Chairman, having founding family members on the board and a high proportion of non-executive directors on supporting higher levels of compliance with mandatory IAS/IFRS disclosures. Therefore, another implication would be that parties concerned in forming boards would benefit from taking into consideration the positive impacts these board characteristics have on compliance with financial disclosures. Moreover, this thesis adds a new contribution to the literature by using the partial compliance approach in addition to Cooke's approach. Hence, this study also holds benefits for future studies as they could use the findings portrayed under the two different scoring methods used to further underline the difference amongst methods.

Future research could focus on various grounds such as investigating certain board characteristics and ownership structures on the levels of compliance with voluntary disclosures, environmental disclosures, and firm performance. Similar to this thesis, future studies could also include the fourth mechanism as a variable contributing



to a sound corporate governance structure: audit committees on the level of compliance with mandatory IAS/IFRS disclosures. Also, future research could study more recent years to capture the essence of growth in compliance in the country. Likewise, it is suggested that future studies increase the sample size in order to get more concrete results. Additionally, it is vital to note that each country is subject to its own norms, culture, and practices and would definitely have different economic factors than other countries. Therefore, future studies could also donate several different factors to the topic at hand such as cultural factors and the education levels of members of the board, chief financial officers or individuals on the audit committee. Moreover, future studies could include the possible effects of industrial classifications in their control variables. In the same vein, future research may utilize other research models or methods to better examine the causality between variables. In accordance to assumptions by Owusu-Ansah (1998), linear relationships are expected to exist between the independent and the dependent variables of a regression model and usually act in that regard as impractical constraints on the model. Therefore, future research may embark on studying the associations between corporate governance factors and the degree of compliance with disclosures as non-linear. Since this thesis documented a difference among the extent of compliance under Cooke's method and the partial compliance method, future research could also empirically investigate disclosure levels under both methods to portray in a comparative research how results differ. Finally, future research can conduct a comparative analysis on the new IFRSs prior to and after they were applied in the onset of 2018 to capture the essence of the changes in compliance with mandatory IFRS disclosures.

## References

- Abd-Elsalam, O. H. (1999). *The introduction and application of international accounting standards to accounting disclosure regulations of a capital market in a developing country: the case of Egypt* (Doctoral dissertation, Heriot-Watt University).
- Abd-Elsalam, O. H., & Weetman, P. (2003). Introducing International Accounting Standards to an emerging capital market: relative familiarity and language effect in Egypt. *Journal of International Accounting, Auditing and Taxation*, 12(1), 63-84.
- Abdelsalam, O. H., & Weetman, P. (2007). Measuring accounting disclosure in a period of complex changes: the case of Egypt. *Advances in international accounting*, 20, 75-104.
- Abdul Rahman, A., & Hamdan, M. D. (2017). The extent of compliance with FRS 101 standard: Malaysian evidence. *Journal of Applied Accounting Research*, 18(1), 87-115.
- Abdullah, M., & Minhat, M. (2013). Measuring Compliance with IFRS Mandatory Disclosure Requirements: Some Evidence from Malaysia. *Australian Journal of Basic and Applied Sciences*, 7(8), 163-169.
- Abdullah, M., Evans, L., Fraser, I., & Tsalavoutas, I. (2015, December). IFRS Mandatory disclosures in Malaysia: the influence of family control and the value (ir) relevance of compliance levels. In *Accounting Forum* (Vol. 39, No. 4, pp. 328-348). Taylor & Francis.
- Acock, A. C. (2008). *A gentle introduction to Stata*. Stata press.
- Adams, M. B. (1994). Agency theory and the internal audit. *Managerial auditing journal*, 9(8), 8-12.

- Admati, A. R., & Pfleiderer, P. (2000). Forcing firms to talk: Financial disclosure regulation and externalities. *The Review of financial studies*, 13(3), 479-519.
- Aguilera, R. V., Florackis, C., & Kim, H. (2016). Advancing the corporate governance research agenda. *Corporate Governance: An International Review*, 24(3), 172-180.
- Agyei-Mensah, B. K. (2013). Adoption of international financial reporting standards (IFRS) in Ghana and the quality of financial statement disclosures. *Macrothink Institute, International Journal of Accounting and Financial Reporting*, ISSN, 2162-3082.
- Agyei-Mensah, B. K. (2017). The relationship between corporate governance, corruption and forward-looking information disclosure: a comparative study. *Corporate Governance: The International Journal of Business in Society*, 17(2), 284-304.
- Ahmed, J. U., & Karim, A. K. M. (2005). Determinants of IAS disclosure compliance in emerging economies: Evidence from exchange listed companies in Bangladesh.
- Ahmed, K., & Nicholls, D. (1994). *The impact of non-financial company characteristics on mandatory disclosure compliance in developing countries: The case of Bangladesh*.
- Ajinkya, B., Bhojraj, S., & Sengupta, P. (2005). The association between outside directors, institutional investors and the properties of management earnings forecasts. *Journal of accounting research*, 43(3), 343-376.
- Akhtaruddin, M. (2005). Corporate mandatory disclosure practices in Bangladesh. *The International Journal of Accounting*, 40(4), 399-422.
- Akhtaruddin, M., & Haron, H. (2010). Board ownership, audit committees'

- effectiveness and corporate voluntary disclosures. *Asian Review of Accounting*, 18(1), 68-82.
- Al Mutawaa, A., & Hewaidy, A. M. (2010). Disclosure level and compliance with IFRSs: An empirical investigation of Kuwaiti companies. *International Business & Economics Research Journal (IBER)*, 9(5).
- Al-Akra, M. (2008). *Privatization and Corporate Disclosure: The Influence of Ownership Changes, Governance Reforms and Regulation on Corporate Disclosure Practices in Jordan* (Doctoral dissertation, University of New England).
- Al-Akra, M., Eddie, I. A., & Ali, M. J. (2010). The influence of the introduction of accounting disclosure regulation on mandatory disclosure compliance: Evidence from Jordan. *The British Accounting Review*, 42(3), 170-186
- Al-Khater, K., & Naser, K. (2003). Users' perceptions of corporate social responsibility and accountability: evidence from an emerging economy. *Managerial Auditing Journal*, 18(6/7), 538-548.
- Al-Maliki, I., Hammami, H., & Mardini, G. H. (2015). Corporate financial reporting in Qatar: a study of individual investors' assessment of annual reports. *Middle East Journal of Management*, 2(1), 79-96.
- Al-Mannai, E. S., & Hindi, N. M. (2015). Adoption of IFRS by listed companies in Qatar: challenges and solutions. *International Journal of Accounting and Finance*, 5(1), 1-26
- Al-Moghawli, M. H. (2009). A survey of internet financial reporting in Qatar. *Journal of Economic and Administrative Sciences*, 25(1), 1-20.
- Al-Mulhem, A. A. (1997). *An empirical investigation of the level of financial disclosure by Saudi Arabian corporations* (Doctoral dissertation, University of Hull).

- Al-Sartawi, A. (2015). The effect of corporate governance on the performance of the listed companies in the gulf cooperation council countries. *Jordan Journal of Business Administration*, 11(3), 705-725.
- Al-Sartawi, A. (2017, May). The effect of the electronic financial reporting on the market value added of the islamic banks in gulf cooperation council countries. In *8th Global Islamic Marketing Conference* (pp. 4-6).
- Al-Sartawi, A., Alrawahi, F., & Sanad, Z. (2016). Corporate governance and the level of compliance with international accounting standards (IAS-1): Evidence from Bahrain Bourse. *International Research Journal of Finance and Economics*, 157, 110-122.
- Al-Shammari, B. (2014). Kuwait corporate characteristics and level of risk disclosure: a content analysis approach. *Journal of Contemporary Issues in Business Research*, 3(3), 128-153.
- Al-Shammari, B., & Al-Sultan, W. (2010). Corporate governance and voluntary disclosure in Kuwait. *International Journal of Disclosure and Governance*, 7(3), 262-280.
- 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-Shiab, M. (2003). *Financial consequences of IAS adoption: the case of Jordan* (Doctoral dissertation, Newcastle University).
- Al-Uliss, I. (2006). *Corporate financial reporting reform in economics in transition: The extent of compliance with international financial reporting standards disclosure requirements in annual reports* (Doctoral dissertation, University of

Surrey (United Kingdom)).

- Alali, F., & Cao, L. (2010). International financial reporting standards—credible and reliable? An overview. *Advances in Accounting*, 26(1), 79-86
- Alanezi, F. S., & Albuloushi, S. S. (2011). Does the existence of voluntary audit committees really affect IFRS-required disclosure? The Kuwaiti evidence. *International Journal of Disclosure and Governance*, 8(2), 148-173.
- Alattar, J. M., & Al-Khater, K. N. (2011). Factors Impact the Timeliness of Corporate Reporting: Evidence from an emerging economy. *The Arab Journal of Accounting*, 14(01).
- Albawwat, A. H., & Ali Basah, M. (2015). Corporate governance and voluntary disclosure of interim financial reporting in Jordan. *Journal of Public Administration and Governance*, 5(2), 100-127.
- Alchian, A. A. (1965). Some economics of property rights. *Il politico*, 816-829.
- Alfaraih, M. (2009). *Compliance with international financial reporting standards (IFRS) and the value relevance of accounting information in emerging stock markets: evidence from Kuwait* (Doctoral dissertation, Queensland University of Technology).
- Alfraih, M. M. (2016). The effectiveness of board of directors' characteristics in mandatory disclosure compliance. *Journal of Financial Regulation and Compliance*, 24(2), 154-176.
- Alhazaimh, A., Palaniappan, R., & Almsafir, M. (2014). The impact of corporate governance and ownership structure on voluntary disclosure in annual reports among listed Jordanian companies. *Procedia-Social and Behavioral Sciences*, 129, 341-348.
- Aljifri, K. (2008). Annual report disclosure in a developing country: The case of the

UAE. *Advances in Accounting*, 24(1), 93-100.

Aljifri, K., Alzarouni, A., Ng, C., & Tahir, M. I. (2014). The association between firm characteristics and corporate financial disclosures: evidence from UAE companies. *The International Journal of Business and Finance Research*, 8(2), 101-123.

Allegrini, M., & Greco, G. (2013). Corporate boards, audit committees and voluntary disclosure: Evidence from Italian listed companies. *Journal of Management & Governance*, 17(1), 187-216.

Almudehki, N., & Zeitun, R. (2012). Ownership structure and corporate performance: Evidence from Qatar. *Available at SSRN 2154289*.

AlNaimi, H. A., Hossain, M., & Ahmed Momin, M. (2012). Corporate social responsibility reporting in Qatar: a descriptive analysis. *Social Responsibility Journal*, 8(4), 511-526.

Alrawahi, F. E., & Sarea, A. M. (2016). An investigation of the level of compliance with international accounting standards (IAS 1) by listed firms in Bahrain Bourse. *International Journal of Islamic and Middle Eastern Finance and Management*, 9(2), 254-276.

Amico, A. (2014). Corporate Governance Enforcement in the Middle East and North Africa.

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.

Appiah, K. O., Awunyo-Vitor, D., Mireku, K., & Ahiagbah, C. (2016). Compliance with international financial reporting standards: the case of listed firms in Ghana. *Journal of Financial Reporting and Accounting*, 14(1), 131-156.

- Arcay, M. R. B., & Vázquez, M. F. M. (2005). Corporate characteristics, governance rules and the extent of voluntary disclosure in Spain. *Advances in Accounting, 21*, 299-331.
- Ashbaugh, H., & Pincus, M. (2001). Domestic accounting standards, international accounting standards, and the predictability of earnings. *Journal of accounting research, 39*(3), 417-434.
- Assenso-Okofu, O., Ali, M. J., & Ahmed, K. (2011). The development of accounting and reporting in Ghana. *The International Journal of Accounting, 46*(4), 459-480.
- Awadallah, E. (n.d.). Measuring the effectiveness of selected corporate governance practices and their implications for audit quality: evidence from Qatar. *Afro-Asian Journal of Finance and Accounting*, [Forthcoming].
- Bartlett, S. A., & Chandler, R. A. (1997). The corporate report and the private shareholder: Lee and Tweedie twenty years on. *The British Accounting Review, 29*(3), 245-261.
- Baydoun, N., Maguire, W., Ryan, N., & Willett, R. (2013). Corporate governance in five Arabian gulf countries. *Managerial Auditing*
- Bear, S., Rahman, N., & Post, C. (2010). The impact of board diversity and gender composition on corporate social responsibility and firm reputation. *Journal of Business Ethics, 97*(2), 207-221.
- Beasley, M. S. (1996). An empirical analysis of the relation between the board of director composition and financial statement fraud. *Accounting review, 44*-465.
- Ben Othman, H., & Kossentini, A. (2015). IFRS adoption strategies and theories of economic development: Effects on the development of emerging stock



- markets. *Journal of Accounting in Emerging Economies*, 5(1), 70-121.
- Benjamin, L. M. (2008). Account space: How accountability requirements shape nonprofit practice. *Nonprofit and Voluntary Sector Quarterly*, 37(2), 201-223.
- Berle, A., & Means, G. (1932). *The Modern Corporation and Private Property*. Macmillan. *New York*, 2(3), 45-53.
- Bhasa, M. P. (2006). Ownership structure and firm performance: A review of literature. *ICFAI Journal of Corporate Governance*, 4(4), 29-49.
- Boonlert-U-Thai, K., Meek, G. K., & Nabar, S. (2006). Earnings attributes and investor-protection: International evidence. *The International Journal of Accounting*, 41(4), 327-357.
- Boshnak, H. (2017). *Mandatory and voluntary disclosures in GCC listed firms* (Doctoral dissertation, University of the West of England).
- Boubakri, N., Cosset, J. C., & Guedhami, O. (2005). Postprivatization corporate governance: The role of ownership structure and investor protection. *Journal of Financial Economics*, 76(2), 369-399.
- Bova, F., & Pereira, R. (2012). The determinants and consequences of heterogeneous IFRS compliance levels following mandatory IFRS adoption: Evidence from a developing country. *Journal of International Accounting Research*, 11(1), 83-111.
- Boycko, M., Shleifer, A., & Vishny, R. W. (1996). A theory of privatisation. *The Economic Journal*, 106(435), 309-319.
- Brown, P. (2011). International Financial Reporting Standards: what are the benefits?. *Accounting and business research*, 41(3), 269-285.
- Burkart, M., Panunzi, F., & Shleifer, A. (2003). Family firms. *The journal of finance*, 58(5), 2167-2201.

- Bushman, R. M., & Smith, A. J. (2001). Financial accounting information and corporate governance. *Journal of accounting and Economics*, 32(1-3), 237-333.
- Cadbury, A. (1992). *Report of the committee on the financial aspects of corporate governance* (Vol. 1). Gee.
- Campbell, K., & Mínguez-Vera, A. (2008). Gender diversity in the boardroom and firm financial performance. *Journal of business ethics*, 83(3), 435-451.
- Campbell, R. D., Ghosh, C., Petrova, M., & Sirmans, C. F. (2011). Corporate governance and performance in the market for corporate control: The case of REITs. *The journal of real estate finance and economics*, 42(4), 451-480.
- Cerbioni, F., & Parbonetti, A. (2007). Exploring the effects of corporate governance on intellectual capital disclosure: an analysis of European biotechnology companies. *European Accounting Review*, 16(4), 791-826.
- Chamisa, E. E. (2000). The relevance and observance of the IASC standards in developing countries and the particular case of Zimbabwe. *The International Journal of Accounting*, 35(2), 267-286.
- Cheng, E. C., & Courtenay, S. M. (2006). Board composition, regulatory regime and voluntary disclosure. *The international journal of accounting*, 41(3), 262-289.
- Choi, F. D., & Levich, R. M. (1991). Behavioral effects of international accounting diversity. *Accounting Horizons*, 5(2), 1.
- Choi, F. D., & Mueller, S. (1992). What is coefficient alpha? An examination of theory and application. *Journal of Applied Psychology*, 78(2), 98-104.
- Connelly, J. T., & Limpaphayom, P. (2004). Environmental reporting and firm performance: evidence from Thailand. *Journal of Corporate Citizenship*, (13), 137-149.
- Cooke, T. E. (1989). Voluntary corporate disclosure by Swedish companies. *Journal of*

- International Financial Management & Accounting*, 1(2), 171-195.
- Cooke, T. E. (1990). An Empirical Study of Financial Disclosure by Swedish Companies.
- Cooke, T. E. (1992). The impact of size, stock market listing and industry type on disclosure in the annual reports of Japanese listed corporations. *Accounting and Business Research*, 22(87), 229-237.
- Craig, R., & Diga, J. (1998). Corporate accounting disclosure in ASEAN. *Journal of International Financial Management & Accounting*, 9(3), 246-274.
- Craswell, A. T., & Taylor, S. L. (1992). Discretionary disclosure of reserves by oil and gas companies: an economic analysis. *Journal of Business Finance & Accounting*, 19(2), 295-308.
- Crowley, M. D. (2011). IFRS Mandatory Disclosures: Evidence of Form Over Substance in the New EU.
- Crowther, D. and Güler, A. (2008). *Corporate social responsibility*. David Crowther and Güler Aras & Ventus Publishing APS.
- Cunha, P. R. D., & Piccoli, M. R. (2017). Influence of board interlocking on earnings management. *Revista Contabilidade & Finanças*, 28(74), 179-196.
- Dahawy, K. (2009). Company characteristics and disclosure level: The case of Egypt. *International Research Journal of Finance and Economics*, 34(2), 220-230.
- Dahya, J., Lonie, A. A., & Power, D. M. (1996). The case for separating the roles of chairman and CEO: An analysis of stock market and accounting data. *Corporate Governance: An International Review*, 4(2), 71-77.
- Dalwai, T. A. R., Basiruddin, R., & Abdul Rasid, S. Z. (2015). A critical review of relationship between corporate governance and firm performance: GCC banking sector perspective. *Corporate Governance*, 15(1), 18-30.

- Davis, G. F. (1993, August). Who gets ahead in the market for corporate directors: the political economy of multiple board memberships. In *Academy of Management Proceedings* (Vol. 1993, No. 1, pp. 202-206). Briarcliff Manor, NY 10510: Academy of Management.
- Demir, V., & Bahadir, O. (2014). An investigation of compliance with International Financial Reporting Standards by listed companies in Turkey. *Accounting and Management Information Systems*, 13(1), 4.
- Denis, D. K., & McConnell, J. J. (2003). International corporate governance. *Journal of Financial and Quantitative Analysis*, 38(1), 1-36.
- Dunn, P. (2012). The role of gender and human capital on the appointment of new corporate directors to boardroom committees: Canadian evidence. *International Business Research*, 5(5), 16.
- Dwivedi, N., & Jain, A. K. (2005). Corporate governance and performance of Indian firms: The effect of board size and ownership. *Employee Responsibilities and Rights Journal*, 17(3), 161-172.
- Ebrahim, A., & Fattah, T. A. (2015). Corporate governance and initial compliance with IFRS in emerging markets: The case of income tax accounting in Egypt. *Journal of International Accounting, Auditing and Taxation*, 24, 46-60.
- Ehikioya, B. I. (2009). Corporate governance structure and firm performance in developing economies: evidence from Nigeria. *Corporate Governance: The international journal of business in society*, 9(3), 231-243.
- El-Gazzar, S. M. (1998). Predisclosure information and institutional ownership: A cross-sectional examination of market revaluations during earnings announcement periods. *Accounting Review*, 119-129.
- ElGammal, W., El-Kassar, A. N., & Canaan Messarra, L. (2018). Corporate ethics,

- governance and social responsibility in MENA countries. *Management Decision*, 56(1), 273-291.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The journal of law and Economics*, 26(2), 301-325.
- Fan, J. P., Wei, K. J., & Xu, X. (2011). Corporate finance and governance in emerging markets: A selective review and an agenda for future research.
- Fekete, S., Matis, D., & Lukács, J. (2008). Factors influencing the extent of corporate compliance with IFRS-The Case of Hungarian listed companies. Available at SSRN 1295722.
- Fernandes, S. R. B. (2017). *Do Firms with a More International Board Comply Better with IFRS Disclosure Requirements?* (Doctoral dissertation, ISCTE-Instituto Universitario de Lisboa (Portugal)).
- Fich, E. M., & Shivdasani, A. (2006). Are busy boards effective monitors?. *The Journal of finance*, 61(2), 689-724.
- Fich, E. M., & White, L. J. (2005). Why do CEOs reciprocally sit on each other's boards?. *Journal of Corporate Finance*, 11(1-2), 175-195.
- Field, A. (2009). *Discovering Statistics Using SPSS*. 3rd edn SAGE Publications Limited: London.
- Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. sage.
- Firth, M. (1978). *A study of the consensus of the perceived importance of disclosure of individual items in corporate annual reports*.
- Floros, C., Spanos, L. J., Tsipouri, L. J., & Xanthakis, M. D. (2008). Corporate governance rating of family firms at the Athens exchange market. *Managerial Finance*.
- Forbes, D. P., & Milliken, F. J. (1999). Cognition and corporate governance:

- Understanding boards of directors as strategic decision-making groups. *Academy of management review*, 24(3), 489-505.
- Forker, J. J. (1992). Corporate governance and disclosure quality. *Accounting and Business research*, 22(86), 111-1
- Galani, D., Alexandridis, A., & Stavropoulos, A. (2011). The association between the firm characteristics and corporate mandatory disclosure the case of Greece. *World Academy of Science, Engineering and Technology*, 77, 101-107.
- Gaur, S. S., Bathula, H., & Singh, D. (2015). Ownership concentration, board characteristics and firm performance: a contingency framework. *Management Decision*, 53(5), 911-931.
- GCI. (2016). The Global Competitiveness Report 2016 – 2017.
- Gebba, T. R. (2015). Corporate governance mechanisms adopted by UAE national commercial banks. *Journal of Applied Finance and Banking*, 5(5), 23.
- Ghazali, N. A. M., & Weetman, P. (2006). Perpetuating traditional influences: Voluntary disclosure in Malaysia following the economic crisis. *Journal of International Accounting, Auditing and Taxation*, 15(2), 226-248.
- Glaum, M., & Street, D. L. (2003). Compliance with the disclosure requirements of Germany's new market: IAS versus US GAAP. *Journal of International Financial Management & Accounting*, 14(1), 64-100.
- Goodstein, J., Gautam, K. & Boeker, W. (1994) The Effects of Board Size and Diversity on Strategic Change, *Strategic Management Journal*, 15, 241–250.
- Grant, G. H. (2003). The evolution of corporate governance and its impact on modern corporate America. *Management Decision*, 41(9), 923-934.
- Gray, S. J., Meek, G. K., & Roberts, C. B. (1995). International capital market pressures and voluntary annual report disclosures by US and UK multinationals. *Journal*

*of International Financial Management & Accounting*, 6(1), 43-68.

Guerra, S., & Santos, R. L. (2011). Busy boards: How Does the simultaneous participation of directors in multiple companies affect the board's activities?.

*Corporate Board: Role, Duties and Composition*, 7(3), 79-89.

Gul, F. A., & Leung, S. (2004). Board leadership, outside directors' expertise and voluntary corporate disclosures. *Journal of Accounting and public Policy*,

23(5), 351-379.

Haddad, A. E., AlShattarat, W. K., AbuGhazaleh, N. M., & Nobanee, H. (2015). The impact of ownership structure and family board domination on voluntary

disclosure for Jordanian listed companies. *Eurasian Business Review*, 5(2), 203-234.

Haniffa, R. M., & Cooke, T. E. (2002). Culture, corporate governance and disclosure in Malaysian corporations. *Abacus*, 38(3), 317-349.

Hashim, H. A., & Devi, S. (2008). Board characteristics, ownership structure and earnings quality: Malaysian evidence. *Research in Accounting in Emerging Economies*,

8(97), 97-123.

Hassaan, M. (2013). The influence of corporate governance structures on compliance with mandatory IFRSs disclosure requirements in the Jordanian

context. *International Journal of Research in Business and Social Science* (2147-4478), 2(3), 14-25.

Hassaan, M. (2013b). The introduction of corporate governance codes in a transitional economy and its impact on compliance with mandatory

disclosures. *International Journal of Research in Business and Social Science* (2147-4478), 2(1), 07-21.

Hassan, M. K. (2015). Corporate governance, organisational power and disclosure by

- firms in the United Arab Emirates. *International Journal of Accounting, Auditing and Performance Evaluation*, 11(3-4), 281-311.
- Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of accounting and economics*, 31(1-3), 405-440.
- Healy, P. M., Hutton, A. P., & Palepu, K. G. (1999). Stock performance and intermediation changes surrounding sustained increases in disclosure. *Contemporary accounting research*, 16(3), 485-520.
- Ho, P. L., & Taylor, G. (2013). Corporate governance and different types of voluntary disclosure: Evidence from Malaysian listed firms. *Pacific Accounting Review*, 25(1), 4-29.
- Ho, S. S., & Wong, K. S. (2001). A study of the relationship between corporate governance structures and the extent of voluntary disclosure. *Journal of International Accounting, Auditing and Taxation*, 10(2), 139-156.
- Hodgdon, C., Tondkar, R. H., Harless, D. W., & Adhikari, A. (2008). Compliance with IFRS disclosure requirements and individual analysts' forecast errors. *Journal of international accounting, auditing and taxation*, 17(1), 1-13.
- Holtz, L., & Neto, A. S. (2014). Effects of board of directors' characteristics on the quality of accounting information in brazil\*. *Revista*
- Hopwood, A. (1979), "Editorial", *Accounting, Organizations and Society*, Vol. 4 Nos 1/2, pp. 145-147.
- Hossain, M., & Hammami, H. (2009). Voluntary disclosure in the annual reports of an emerging country: The case of Qatar. *Advances in Accounting*, 25(2), 255-265.
- Hossain, M., Perera, M. H. B., & Rahman, A. R. (1995). Voluntary disclosure in the annual reports of New Zealand companies. *Journal of International Financial*



*Management & Accounting*, 6(1), 69-87.

Huafang, X., & Jianguo, Y. (2007). Ownership structure, board composition and corporate voluntary disclosure: Evidence from listed companies in China. *Managerial Auditing Journal*, 22(6), 604-619.

Iatridis, G. (2008). Accounting disclosure and firms' financial attributes: Evidence from the UK stock market. *International review of financial analysis*, 17(2), 219-241.

IMF. (2019). *Qatar Implements the International Monetary Fund's Enhanced General Data Dissemination System* [Press release].

Inchausti, B. G. (1997). The influence of company characteristics and accounting regulation on information disclosed by Spanish firms. *European accounting review*, 6(1), 45-68.

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 III, W. N., 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., Davidson III, W. N., 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.

Johl, S. K., Kaur, S., & Cooper, B. J. (2015). Board characteristics and firm performance: Evidence from Malaysian public listed firms. *Journal of Economics, Business and Management*, 3(2), 239-243.

Joshi, P. L., & Ramadhan, S. (2002). The adoption of international accounting standards by small and closely held companies: evidence from Bahrain. *The International*

- Journal of Accounting*, 37(4), 429-440.
- Judge, W. (2012). The importance of considering context when developing a global theory of corporate governance. *Corporate Governance: An International Review*, 20(2), 123-124.
- Judge, W., Li, S., & Pinsker, R. (2010). National adoption of international accounting standards: An institutional perspective. *Corporate Governance: An International Review*, 18(3), 161-174.
- Juhmani, O. (2017). Corporate governance and the level of Bahraini corporate compliance with IFRS disclosure. *Journal of Applied Accounting Research*, 18(1), 22-41.
- Juhmani, O. I. (2013). Ownership structure and corporate voluntary disclosure: evidence from Bahrain. *International Journal of Accounting and Financial Reporting*, 3(2), 133.
- Karagül, A. A., & Yönet, N. K. (2012). Impact of board characteristics and ownership structure on voluntary disclosure: Evidence from Turkey, Retrieved from [www.scholar.google.com](http://www.scholar.google.com).
- Khlif, H., & Souissi, M. (2010). The determinants of corporate disclosure: a meta-analysis. *International Journal of Accounting & Information Management*, 18(3), 198-219.
- KPMG. (2015). IFRS Guide to Annual Financial Statements – Disclosure Checklist.
- KPMG. (2016). Disclosure checklist Guide to annual financial statements.
- KPMG. (2017). Disclosure checklist Guide to annual financial statements.
- Krismiaji, T., & Surifah (2019). Corporate Governance and Firm's Compliance on Disclosure of International Financial Reporting Standards–Indonesian

- Evidence. *International Journal of Accounting, Finance and Risk Management*, 4(1), 24. doi: 10.11648/j.ijafmr.20190401.13
- Krivogorsky, V. (2006). Ownership, board structure, and performance in continental Europe. *The International Journal of Accounting*, 41(2), 176-197.
- Lambert, R., Leuz, C., & Verrecchia, R. E. (2007). Accounting information, disclosure, and the cost of capital. *Journal of accounting research*, 45(2), 385-420.
- Latifah, I. N., Asfadillah, C., & Sukmana, R. (2012, June). History and development of IFRS and AAOIFI and their future challenge. In *Cambridge Business & Economics Conference, Cambridge, MA* (pp. 27-28).
- Leftwich, R. W., Watts, R. L., & Zimmerman, J. L. (1981). Voluntary corporate disclosure: The case of interim reporting. *Journal of accounting research*, 50-77.
- Leung, R., & Ilsever, J. (2013). Review of evidence between corporate governance and mandatory IFRS adoption from the perspective of agency theory and information asymmetry. *Universal Journal of Accounting and Finance*, 1(3), 85-94.
- Leventis, S., & Weetman, P. (2004). Timeliness of financial reporting: applicability of disclosure theories in an emerging capital market. *Accounting and Business Research*, 34(1), 43-56.
- Li, J., & Harrison, J. R. (2008). National culture and the composition and leadership structure of boards of directors. *Corporate Governance: An International Review*, 16(5), 375-385.
- Lorsch, J. W. (1989). with Maclver. *Pawns or Potentates: The Reality of America's Corporate Boards*, Harvard Business School Press, Boston.
- Mak, Y. T., & Li, Y. (2001). Determinants of corporate ownership and board structure:

- evidence from Singapore. *Journal of Corporate Finance*, 7(3), 235–256.
- Mallin, C. (2018). *Corporate governance*. Oxford University Press, USA.
- Malone, D., Fries, C., & Jones, T. (1993). An empirical investigation of the extent of corporate financial disclosure in the oil and gas industry. *Journal of Accounting, Auditing & Finance*, 8(3), 249-273.
- Mangel, R., & Singh, H. (1993). Ownership structure, board relationships and CEO compensation in large US corporations. *Accounting and Business Research*, 23(sup1), 339-350.
- Mangena, M., & Taurigana, V. (2007). Disclosure, corporate governance and foreign share ownership on the Zimbabwe stock exchange. *Journal of International Financial Management & Accounting*, 18(2), 53-85.
- Mardini, G. H. (2013). Narrative Disclosures under IAS 14R and IFRS 8 by Qatar Listed Companies. *GSTF Journal on Business Review (GBR)*, 2(3).
- Mardini, G. H., & Almujaed, H. I. (2015). The adoption of IFRS 8: The case of Qatari listed companies. *International Journal of Managerial and Financial Accounting*, 7(3/4), 173-197.
- Mardini, G. H., & Power, D. M. (2015). Determinants of revenue recognition disclosures: the case of Jordanian industrial listed companies. *Middle East Journal of Management*, 2(2), 178-194.
- Mardini, G. H., & Tahat, Y. (2017). An empirical evidence on audit selection and audit rotation: the case of Qatari listed companies. *International Journal of Accounting, Auditing and Performance Evaluation*, 13(1), 99-122.
- Mardini, G. H., Tahat, Y. A., & Power, D. M. (2013). Determinants of segmental disclosures: evidence from the emerging capital market of Jordan. *International Journal of Managerial and Financial Accounting*, 5(3), 253-276.

- Mardini, G. H., Tahat, Y. A., & Power, D. M. (2018). The extent of segmental reporting and its value relevance: cross-country evidence. *Journal of Accounting in Emerging Economies*, 8(2), 279-299.
- Marston, C. L., & Shrives, P. J. (1991). The use of disclosure indices in accounting research: a review article. *The British Accounting Review*, 23(3), 195-210.
- Marston, C. L., & Shrives, P. J. (1996, May). A review of the development and use of explanatory models in financial disclosure studies. In *19th Annual European Accounting Association Congress, Norway*.
- Mathews, M. R., & Perera, M. H. B. (1996). Accounting theory & development. Thomson Publishing Company.
- McKinnon, J. L., & Dalimunthe, L. (1993). Voluntary disclosure of segment information by Australian diversified companies. *Accounting & Finance*, 33(1), 33-50.
- Melin, L., & Nordqvist, M. (2000). Corporate governance processes in family firms. The role of influential actors and the strategic arena. In *ICSB World Conference* (pp. 42-65).
- Mintzberg, H. (1983). The case for corporate social responsibility. *Journal of Business Strategy*, 4(2), 3-15.
- Mobbs, S. (2013). CEOs under fire: The effects of competition from inside directors on forced CEO turnover and CEO compensation. *Journal of Financial and Quantitative Analysis*, 48(3), 669-698.
- Mohamed, W., & Sulong, Z. (2010). Corporate governance mechanisms and extent of disclosure, evidence from listed companies. *International Business Research*, 3(4), 216-228.
- Mohammadi, A., & Mardini, G. H. (2016). Financial instruments disclosure: the case

- of Qatari listed banks. *Afro-Asian Journal of Finance and Accounting*, 6(2), 160-182.
- Mollah, S., Al Farooque, O., & Karim, W. (2012). Ownership structure, corporate governance and firm performance: Evidence from an African emerging market. *Studies in Economics and Finance*, 29(4), 301-319.
- Morris, R. D., & Morris, R. D. (1987). *Composition with pitch-classes: a theory of compositional design* (p. 1987). New Haven: Yale University Press.
- Nalikka, A. (2009). Impact of gender diversity on voluntary disclosure in annual reports. *Accounting & Taxation*, 1(1), 101-113.
- Nalukenge, I., Nkundabanyanga, S. K., & Ntayi, J. M. (2018). Corporate governance, ethics, internal controls and compliance with IFRS. *Journal of Financial Reporting and Accounting*, 16(4), 764-786.
- Naser, K., & Al-Khatib, K. (2000). The extent of voluntary disclosure in the board of directors' statement: the case of Jordan. *Advances in International Accounting*, 13, 99-118.
- Naser, K., Al-Khatib, K., & Karbhari, Y. (2002). Empirical evidence on the depth of corporate information disclosure in developing countries: the case of Jordan. *International journal of commerce and management*, 12(3/4), 122-155.
- Nguyen, H., & Faff, R. (2007). Impact of board size and board diversity on firm value: Australian evidence. *Corporate ownership and control*, 4(2), 24-32.
- Nobes, C. W. (1990). Compliance by US corporations with IASC standards. *The British Accounting Review*, 22(1), 41-49.
- O'connell, V., & Cramer, N. (2010). The relationship between firm performance and board characteristics in Ireland. *European Management Journal*, 28(5), 387-399.

- OECD (1999), OECD Principles of Corporate Governance.
- OECD (2018), Flexibility and Proportionality in Corporate Governance, Corporate Governance, OECD Publishing, Paris.
- Oman, C. P., & Blume, D. (2005). Corporate Governance: Corporate Governance: A Development Challenge”, (2005). Policy Insights No. 3, OECD Development Centre.
- Owusu-Ansah, S. (1998). The impact of corporate attributes on the extent of mandatory disclosure and reporting by listed companies in Zimbabwe. *The International Journal of Accounting*, 33(5), 605-631.
- Pallant, J. (2013). *SPSS survival manual*. McGraw-Hill Education (UK).
- Peng, S., Tondkar, R. H., van der Laan Smith, J., & Harless, D. W. (2008) Does convergence of accounting standards lead to the convergence of accounting practices?: A study from China. *The International Journal of Accounting*. 43(4), pp. 448-468.
- Planning and Statistics Authority. (2018). Window on Economic Statistics of Qatar. Retrieved from: <https://www.psa.gov.qa/en/statistics>
- Popova, T., Georgakopoulos, G., Sotiropoulos, I., & Vasileiou, K. Z. (2013). Mandatory disclosure and its impact on the company value. *International business research*, 6(5), 1-16.
- Porta, R. L., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. W. (1998). Law and finance. *Journal of political economy*, 106(6), 1113-1155.
- Posner, R. A. (1974). Theories of economic regulation.
- QE. (2017). Retrieved August 7, 2019, from <https://www.qe.com.qa/>.
- QFMA. (2016). Governance Code for Companies & Legal Entities Listed on the Main Market.

- QSE. (2015). Qatar Stock Exchange Rulebook.
- QSE. (2019). Investor Relations. Retrieved 8 October 2019, from <https://www.qe.com.qa/investor-relations>
- Quigley, J. (2009). IFRS: What should boards and audit committees be considering now? Retrieved July 13, 2019, from <https://www.iasplus.com/en/binary/dttpubs/1001ifrsauditcommittees.pdf>.
- Raffournier, B. (1995). The determinants of voluntary financial disclosure by Swiss listed companies. *European Accounting Review*, 4(2), 261-280.
- Rahman, A. A., & Hamdan, M. D. (2019). An Investigation of the Level of Compliance with Financial Reporting Standards (FRS 101) by Malaysian SMEs. *Journal of Economic Info*, 6(1), 26-33.
- Rahman, A. A., Ismail, K. N. I. K., & Hussin, W. N. W. (2011). The Influence of Corporate Governance And Firm's Characteristics on The Extent of Compliance With Masb Standards Among Malaysian Listed Companies. *International Journal of Business and Social Research (IJBSR)*, 1(1).
- Rahman, M. M. A. (2005). The adoption of international accounting standards in Bangladesh. *Accounting, Auditing & Accountability Journal* 18(6), 816, 841.
- Samaha, K., & Dahawy, K. (2010). Factors influencing corporate disclosure transparency in the active share trading firms: An explanatory study. In *Research in Accounting in Emerging Economies* (pp. 87-118). Emerald Group Publishing Limited.
- Samaha, K., & Khelif, H. (2016). Adoption of and compliance with IFRS in developing countries: a synthesis of and directions for future research. *Journal of Accounting in Emerging Economies*, 6(1), 33-49.



- Samaha, K., & Stapleton, P. (2009). Firm-specific determinants of the extent of compliance with international accounting standards in the corporate annual reports of companies listed on the Egyptian Stock Exchange: a positive accounting approach. *Afro-Asian Journal of Finance and Accounting*, 1(3), 266-294.
- Samaha, K., Stapleton, P., Dahawy, K. M., & Conover, T. (2008). Strengthen Co-Operation Strategies Needed to Enhance Compliance with International Accounting Standards in a National Context: A Review of Attitudes of Egyptian Experts. *Available at SSRN 1107705*.
- Santos, E. S., Ponte, V. M. R., Mapurunga, P. V., & Ribeiro, M. S. (2014). Disclosure versus materiality: compliance with the first-time IFRS adoption disclosure requirements (IFRS 1) versus impacts on Brazilian firms' results [Working Paper]. In *American Accounting Association Annual Meeting. Atlanta, GA*.
- Sarea, A. M., & Abdulla Al Dalal, Z. (2015). The level of compliance with International Financial Reporting Standards (IFRS 7) Evidence from Bahrain Bourse. *World Journal of Entrepreneurship, Management and Sustainable Development*, 11(3), 231-244.
- Sartawi, I. I. M., Hindawi, R. M., Bsoul, R., & Ali, A. E. J. (2014). Board composition, firm characteristics, and voluntary disclosure: The case of Jordanian firms listed on the Amman stock exchange. *International Business Research*, 7(6), 67.
- Schulze, W. S., Lubatkin, M. H., Dino, R. N., & Buchholtz, A. K. (2001). Agency relationships in family firms: Theory and evidence. *Organization science*, 12(2), 99-116.
- Shaheen, R., & Nishat, M. (2005, June). Corporate governance and firm performance: An exploratory analysis. In *Conference of Lahore School of Management*

*Sciences, Lahore.*

- Sharar, Z. (2011). Corporate governance in Qatar: a comparative analysis. *Corporate Ownership & Control*, 8(4-1), 225-235.
- Shehata, N. F. (2015). Development of corporate governance codes in the GCC: an overview. *Corporate Governance*, 15(3), 315-338.
- Shehata, N. F. (2017). The status and determinants of corporate governance disclosure: The case of the Gulf countries. *The Journal of Developing Areas*, 51(4), 157-165.
- Shehata, N. F., Dahawy, K. M., & Ismail, T. H. (2014). The relationship between firm characteristics and mandatory disclosure level: when Egyptian accounting standards were first adopted. *Mustang Journal of Accounting and Finance*, 5(4).
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The journal of finance*, 52(2), 737-783.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The journal of finance*, 52(2), 737-783.
- Shukeri, S. N., Shin, O. W., & Shaari, M. S. (2012). Does board of director's characteristics affect firm performance? Evidence from Malaysian public listed companies. *International Business Research*, 5(9), 120.
- Silvia. (2019). IFRS 2019 Update: Major changes you should be aware of - IFRS box - Making IFRS Easy. Retrieved from <https://www.ifrsbox.com/ifrs-2019-update-changes/>.
- Soliman, M. M., Ragab, A. A., & Eldin, M. B. (2014). Board composition, ownership structure and voluntary disclosure: an empirical study of the listed companies in Egypt. *Corporate Ownership & Control*, 415.

- Spence, M. (1978). Job market signaling. In *Uncertainty in economics* (pp. 281-306). Academic Press.
- Street, D. L., & Bryant, S. M. (2000). Disclosure level and compliance with IASs: A comparison of companies with and without US listings and filings. *The International Journal of Accounting*, 35(3), 305-329.
- Street, D. L., & Gray, S. J. (2002). Factors influencing the extent of corporate compliance with International Accounting Standards: summary of a research monograph. *Journal of International Accounting, Auditing and Taxation*, 11(1), 51-76.
- Syriopoulos, T., & Tsatsaronis, M. (2012). Corporate governance mechanisms and financial performance: CEO duality in shipping firms. *Eurasian Business Review*, 2(1), 1-30.
- Tabachnick, B. G., Fidell, L. S., & Ullman, J. B. (2007). *Using multivariate statistics* (Vol. 5). Boston, MA: Pearson.
- Tahat, Y., Mardini, G. H., & Power, D. M. (2017). Factors affecting financial instruments disclosure in emerging economies: the case of Jordan. *Afro-Asian Journal of Finance and Accounting*, 7(3), 255-280.
- Tahat, Y., Mardini, G., & Haddad, A. E. (2018). A longitudinal analysis of financial instruments disclosure in an emerging capital market: the case of Qatar. *International Journal of Accounting and Finance*, 8(1), 60-79
- Taylor, G., Tower, G., Van Der Zahn, M., & Neilson, J. (2008). Corporate governance determinants on Australian resource companies' financial instrument disclosure practices. *Asian Review of Accounting*, 16(1), 56-73.
- Taylor, P., & Turley, S. (1986). *The regulation of accounting*. Oxford: Basil Blackwell.
- The World Bank. (2019). Qatar Economic Update – April 2019. Retrieved from

<https://www.worldbank.org/en/country/gcc/publication/qatar-economic-update-april-2019>.

- Tower, G., Hancock, P., & Taplin, R. H. (1999, September). A regional study of listed companies' compliance with international accounting standards. In *Accounting Forum* (Vol. 23, No. 3, pp. 293-305). Blackwell Publishers Ltd.
- Tricker, R. B., & Tricker, R. I. (2015). *Corporate governance: Principles, policies, and practices*. Oxford University Press, USA.
- Tsalavoutas, I. (2011). Transition to IFRS and compliance with mandatory disclosure requirements: What is the signal?. *Advances in Accounting*, 27(2), 390-405.
- Tsalavoutas, I., & Evans, L. (2010). Transition to IFRS in Greece: financial statement effects and auditor size. *Managerial Auditing Journal*, 25(8), 814-842.
- Tsalavoutas, I., André, P., & Evans, L. (2012). The transition to IFRS and the value relevance of financial statements in Greece. *The British Accounting Review*, 44(4), 262-277.
- Tsalavoutas, I., André, P., & Evans, L. (2012). The transition to IFRS and the value relevance of financial statements in Greece. *The British Accounting Review*, 44(4), 262-277.
- Ujunwa, A. (2012). Board characteristics and the financial performance of Nigerian quoted firms. *Corporate Governance: The international journal of business in society*, 12(5), 656-674.
- Van Buskirk, A. (2012). Disclosure frequency and information asymmetry. *Review of Quantitative Finance and Accounting*, 38(4), 411-440.
- Vergoossen, R. G. (1993). The use and perceived importance of annual reports by investment analysts in the Netherlands. *European Accounting Review*, 2(2), 219-244.

- Vlachos, C. (2001). *An empirical investigation of the financial disclosure practices of Cypriot and Greek companies* (Doctoral dissertation, Middlesex University).
- Wallace, R. O., & Naser, K. (1995). Firm-specific determinants of the comprehensiveness of mandatory disclosure in the corporate annual reports of firms listed on the stock exchange of Hong Kong. *Journal of Accounting and Public Policy, 14*(4), 311-368.
- Wallace, R. O., Naser, K., & Mora, A. (1994). The relationship between the comprehensiveness of corporate annual reports and firm characteristics in Spain. *Accounting and Business Research, 25*(97), 41-53.
- Wang, D. (2006). Founding family ownership and earnings quality. *Journal of Accounting Research, 44*(3), 619-656.
- Watson, A., Shrivess, P., & Marston, C. (2002). Voluntary disclosure of accounting ratios in the UK. *The British Accounting Review, 34*(4), 289-313.
- Watts, R. L., & Zimmerman, J. L. (1986). *Positive accounting theory*. Englewood Cliffs, New Jersey: Prentice-Hall.
- Weisburd, D., & Britt, C. (2007). *Statistics in criminal justice*. Springer Science & Business Media.
- World Economic Forum (2018). *The Global Competitiveness Report*.
- Yeoh, J. (2005). Compliance with mandatory disclosure requirements by New Zealand listed companies. *Advances in International Accounting, 18*, 245-262.
- Yermack, D. (1996). Higher market valuation of companies with a small board of directors. *Journal of Financial Economics, 40*(2), 185-211.
- Yiadom, E. M., & Atsunyo, W. (2014). Compliance with international financial reporting standards by listed companies in Ghana. *International Journal of Business and Management, 9*(10), 87.

## Appendix A: Excluded IASs/IFRSs with Exclusion Reasons

Standard	Title	Reason for Exclusion
IAS 10	Events after the Balance-Sheet Date	Not applicable as there is no implication of this standard to the sample selected.
IAS 11	Construction Contracts	This standard is only applicable to construction entities.
IAS 12	Income Taxes	Listed Entities are exempt from tax income.
IAS 17	Leases	This standard is only applicable to specific entities that apply the Operating lease and Finance lease-Not all
IAS 19	Employee Benefits	This standard only applied in one entity and remaining entities do not consider it due to materiality
IAS 20	Accounting for Government Grants and Disclosure of Government Assistance	Not applicable as there is no implication of this standard to the sample selected.
IAS 26	Accounting and Reporting by Retirement Benefit Plans	Not applicable as there is no implication of this standard to the sample selected.
IAS 27	Separate Financial Statements	Not applicable as the sample are all consolidated financial statements.
IAS 28	Investments in Associates and Joint Ventures	This standard is only applicable to few entities.
IAS 29	Financial Reporting in Hyperinflationary Economies	Not applicable as there is no implication of this standard to the sample selected.
IAS 32	Financial Instruments: Presentation	The disclosure of this part is included in IAS 1.
IAS 34	Interim Financial Reporting	Not applicable as the focus is on the year-end financial statements.
IAS 38	Intangible Assets	This standard is only applicable to few entities; therefore; it is excluded.
IAS 39	Financial Instruments: Recognition and Measurement	The disclosure of this part is included in IAS 1.
IAS 40	Investment Property	This standard is only applicable to few entities; therefore; it is excluded.
IAS 41	Agriculture	Not applicable since this industry is not in the sample selected.
IAS 8	Accounting Policies, Changes in Accounting Estimates and Errors	Not applicable as there is no implication of this standard to the sample selected.
IFRS 1	First-time Adoption of International Financial Reporting Standards	Not applicable since no entities and their subsidiaries are first time adopters that has impact on financial statement of the sample selected.
IFRS 2	Share-Based Payment	Not applicable as there is no implication of this standard to the sample selected.
IFRS 3	Business Combinations	Not applicable as there is no implication of this standard to the sample selected.
IFRS 4	Insurance Contracts	Not applicable since this industry is not in the sample selected.
IFRS 5	Non-Current Assets Held for Sale and Discontinued Operations	Not applicable as there is no implication of this standard to the sample selected.
IFRS 6	Exploration for and Evaluation of Mineral Resources	Not applicable since this industry is not in the sample selected.
IFRS 7	Financial Instruments: Disclosures	Not applicable since this industry is not in the sample selected.
IFRS 9	Financial Instruments	Not applicable as this standard effective from 1 January 2018; early application is permitted. The listed entities did not use early application of this standard.
IFRS 10	Consolidated Financial Statements	The disclosure of this part is included in IAS 1.
IFRS 11	Joint Arrangements	This standard is only applicable to a few entities.
IFRS 12	Disclosure of Interests in Other Entities	This standard is only applicable to a few entities.
IFRS 13	Fair Value Measurement	This standard is only applicable to a few entities.
IFRS 14	Regulatory Deferral Accounts	Not applicable as there is no implication of this standard to the sample selected.
IFRS 15	Revenue from Contracts with Customers	Not applicable as this standard effective from 1 January 2018; early application is permitted. The listed entities did not use early application of this standard.
IFRS 16	Leases	Not applicable as this standard effective from 1 January 2019; early application is permitted. The listed entities did not use early application of this standard.
IFRS 17	Insurance Contracts	Not applicable since this industry is not in the sample selected.

## Appendix B: DCS Results for 2015

ID: Items Disclosed AI: Applicable Items		Compliance Score per company for 2015 based on Dichotomous Method Scoring																							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Company No.																									
IAS 1	ID	42	41	41	42	40	41	42	41	44	40	40	39	42	41	42	42	41	43	42	41	43	42	40	40
	AI	42	41	41	42	43	40	42	43	41	44	40	41	40	42	41	43	43	42	44	43	43	40	42	41
IAS 2	ID	4	4	4	4	3	4	1	5	4	5	0	5	0	1	4	4	4	4	4	5	5	3	5	3
	AI	4	4	4	4	3	4	3	6	4	6	0	6	0	3	4	4	4	4	4	6	6	3	6	3
IAS 7	ID	11	12	11	12	13	12	12	11	13	12	11	10	11	10	13	10	13	14	13	14	13	12	12	12
	AI	13	14	14	13	14	14	14	14	13	15	14	13	11	13	12	15	12	15	16	15	14	13	13	13
IAS 16	ID	4	5	6	5	4	4	5	4	4	7	3	9	0	3	5	7	4	4	5	6	8	4	3	4
	AI	4	5	6	5	4	4	5	4	4	10	3	9	0	4	5	7	4	4	6	6	9	5	4	4
IAS 18	ID	3	2	4	2	4	4	1	0	4	0	3	2	1	1	2	3	3	4	4	4	2	3	2	3
	AI	3	4	4	2	4	4	1	4	4	3	3	3	1	3	3	3	4	4	4	4	3	4	2	3
IAS 21	ID	1	1	1	1	2	2	1	1	1	2	1	1	0	1	1	2	2	3	2	1	1	1	2	1
	AI	1	1	1	1	2	2	1	1	1	2	1	1	0	1	1	2	2	3	2	1	1	1	1	2
IAS 23	ID	2	0	2	1	2	0	2	1	2	0	1	1	0	1	0	1	0	1	1	2	1	0	2	0
	AI	2	0	2	2	2	0	2	2	2	0	2	2	0	2	0	2	0	2	2	2	2	2	0	2
IAS 24	ID	7	7	8	5	5	4	6	8	10	8	8	4	5	3	5	3	6	8	6	6	7	7	3	6
	AI	9	7	10	9	10	11	8	9	12	8	9	11	7	9	7	8	8	8	8	8	8	8	8	8
IAS 36	ID	0	1	1	0	2	2	0	2	2	0	0	0	0	0	2	0	2	2	2	2	2	0	1	2
	AI	0	2	2	0	2	2	0	2	2	4	0	2	0	0	2	0	2	2	2	2	2	2	0	2
IAS 37	ID	4	2	3	3	0	2	0	0	2	4	0	3	0	0	2	4	2	3	4	2	0	3	0	3
	AI	4	2	3	3	0	2	0	2	2	4	0	3	0	0	2	4	2	3	4	2	3	4	2	3
IFRS 8	ID	11	9	15	2	13	19	5	0	17	16	2	3	2	2	12	17	8	5	15	6	23	3	2	8
	AI	19	17	19	7	15	20	14	13	21	21	3	7	2	7	15	23	8	19	21	14	23	6	6	14
IAS 33	ID	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	AI	3	3	3	3	3	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Total Disclosed Items		89	84	97	76	89	94	74	75	98	99	70	79	57	65	82	98	81	88	101	88	102	77	71	85
Applicable Items		104	100	109	91	102	106	93	104	109	120	78	101	64	87	93	116	90	109	118	105	114	87	88	99
Total Score for Firm (x)		0.86	0.84	0.89	0.84	0.87	0.89	0.80	0.72	0.90	0.83	0.90	0.78	0.89	0.75	0.88	0.84	0.90	0.81	0.86	0.83	0.89	0.81	0.86	0.86
<b>DCS<sub>2015</sub></b>		86%	84%	89%	84%	87%	89%	80%	72%	90%	83%	90%	78%	89%	75%	88%	84%	90%	81%	86%	83%	89%	81%	86%	86%

DCS<sub>2015</sub> =  $\frac{\text{Number of disclosed items}}{\text{TOTAL number of applicable items to the company}}$

DCS: Disclosure Compliance Score  
Q Company 'Q'  
Y Year

## Appendix C: DCS Results for 2016

ID: Items Disclosed AI: Applicable Items		Compliance Score per company for 2016 based on Dichotomous Method Scoring																								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Company		42	41	41	42	40	42	41	41	41	43	40	40	39	42	41	43	42	41	43	42	41	43	40	40	
IAS1	ID	42	41	41	42	43	40	43	42	41	43	40	41	40	42	41	43	43	42	44	43	43	40	42	41	
IAS2	ID	5	5	6	5	3	3	1	5	6	5	0	5	0	1	4	4	4	4	4	5	4	3	5	3	5
	AI	6	6	6	6	3	3	3	6	6	6	0	6	0	3	4	5	4	6	6	4	3	6	3	6	
IAS7	ID	11	11	13	12	13	13	12	12	11	13	12	11	10	11	11	13	10	13	14	13	13	12	12	12	
	AI	13	14	15	14	15	14	14	14	13	15	14	13	11	13	13	15	12	15	16	15	15	13	13	13	
IAS16	ID	4	4	5	5	4	4	5	4	4	7	3	9	0	3	6	8	4	5	5	5	8	4	3	4	
	AI	4	4	5	5	4	4	5	4	4	10	3	9	0	4	6	8	4	5	6	5	9	5	4	4	
IAS18	ID	3	2	4	2	4	4	1	0	4	0	3	2	1	1	3	3	4	4	4	4	2	3	2	3	4
	AI	3	4	4	3	4	4	1	4	4	3	3	3	1	3	3	3	4	4	4	4	3	4	2	3	4
IAS21	ID	1	1	1	1	2	2	1	1	1	2	1	1	0	1	1	2	2	3	2	1	1	1	2	1	
	AI	1	1	1	1	2	2	1	1	1	2	1	1	0	1	1	2	2	3	2	1	1	1	1	2	1
IAS23	ID	2	0	2	2	2	0	2	1	0	0	1	1	0	1	1	1	0	1	1	1	2	1	0	2	0
	AI	2	0	2	2	2	0	2	2	0	0	2	2	0	2	2	2	0	2	2	2	2	2	0	2	2
IAS24	ID	7	7	8	5	5	4	6	8	8	8	8	4	5	3	5	3	8	8	6	6	7	7	3	6	
	AI	9	7	10	9	10	10	8	9	10	8	9	11	8	8	7	8	10	8	8	8	8	8	7	8	
IAS36	ID	0	0	1	0	2	2	0	1	2	0	0	0	0	0	2	2	0	2	2	0	2	0	2	2	
	AI	0	0	3	0	2	2	0	2	2	2	0	2	0	2	2	2	2	2	2	2	2	0	2	3	
IAS37	ID	3	2	3	3	0	2	0	0	2	4	0	3	0	0	2	4	2	3	4	2	0	3	0	3	
	AI	3	2	3	3	0	2	0	2	2	4	0	3	0	0	2	4	2	3	4	2	0	3	0	3	
IFRS8	ID	11	9	16	2	13	20	6	0	17	16	2	3	2	2	12	17	8	5	15	6	23	2	2	8	
	AI	20	18	20	7	15	21	14	16	21	21	2	7	2	7	15	23	8	19	21	14	23	5	6	14	
IAS33	ID	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
	AI	3	3	3	3	3	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Total Disclosed Items		92	85	103	82	93	97	79	76	99	101	73	82	60	68	91	103	86	92	104	86	106	79	75	88	
Applicable Items		106	100	113	95	103	105	94	106	107	117	77	101	65	86	99	118	94	112	118	100	115	86	87	102	
Total Score for Firm (x)		0.87	0.85	0.91	0.86	0.90	0.92	0.84	0.72	0.93	0.86	0.95	0.81	0.92	0.79	0.92	0.87	0.91	0.82	0.88	0.86	0.92	0.92	0.86	0.86	
<b>DCS<sub>2016</sub></b>		87%	85%	91%	86%	90%	92%	84%	72%	93%	86%	95%	81%	92%	79%	92%	87%	91%	82%	88%	86%	92%	92%	86%	86%	

$$DCS_{gr} = \frac{\text{Number of disclosed items}}{\text{TOTAL number of applicable items to the company}}$$



## Appendix D: DCS Results for 2017

ID: Items Disclosed AI: Applicable Items		Compliance Score per company for 2017 based on Dichotomous Method Scoring																								
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Company		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
IAS 1	ID	43	42	41	42	40	42	41	40	40	40	40	39	42	41	43	41	43	41	43	42	42	41	39	40	
	AI	43	43	41	42	43	40	43	42	40	40	41	40	40	42	41	43	42	42	44	42	43	41	41		
IAS 2	ID	5	5	6	4	3	3	1	5	6	6	0	5	0	1	4	4	5	4	5	4	4	4	3	5	
	AI	6	6	6	4	3	3	3	6	6	7	0	6	0	3	5	4	6	6	6	4	4	4	3	6	
IAS 7	ID	10	11	11	11	12	13	12	13	12	11	10	11	10	11	11	13	10	13	14	13	14	12	12	12	
	AI	12	13	14	13	14	14	14	15	14	15	14	13	11	13	13	15	12	15	16	15	16	13	13	13	
IAS 16	ID	4	4	5	5	4	4	4	4	4	8	3	9	0	4	5	7	4	4	5	5	8	4	3	4	
	AI	4	4	5	5	4	4	4	4	4	11	3	9	0	4	5	7	4	4	6	6	9	5	4	4	
IAS 18	ID	3	2	4	3	4	4	1	0	4	0	3	2	1	1	3	3	4	4	4	2	3	2	3	4	
	AI	3	4	4	3	4	4	1	4	4	3	3	3	1	3	3	3	4	4	4	4	3	4	2	3	4
IAS 21	ID	1	1	1	1	2	2	1	1	1	2	1	1	0	1	1	2	2	3	2	1	1	1	2	1	
	AI	1	1	1	1	2	2	1	1	1	2	1	1	0	1	1	2	2	3	2	1	1	1	2	1	
IAS 23	ID	2	2	2	0	2	0	2	1	0	0	1	1	0	1	1	1	0	1	1	2	1	0	0	0	
	AI	2	2	2	2	2	0	2	2	0	0	2	2	0	2	2	2	0	2	2	2	2	0	0	0	
IAS 24	ID	6	7	5	5	5	4	6	9	8	8	8	4	5	3	5	3	8	8	6	6	7	7	3	6	
	AI	10	9	10	8	9	10	8	9	9	8	9	11	8	8	7	8	10	8	8	8	8	8	7	8	
IAS 36	ID	0	0	2	0	2	0	0	2	2	0	0	0	0	0	0	0	2	0	2	2	0	1	2	2	
	AI	0	0	3	0	2	0	0	2	2	2	0	2	0	0	0	2	2	2	2	2	0	2	2	2	
IAS 37	ID	3	2	3	3	0	2	0	0	2	4	0	3	0	0	2	4	3	3	4	2	0	3	0	3	
	AI	3	2	3	3	0	2	0	2	2	4	0	3	0	0	2	4	3	3	4	2	2	3	0	3	
IFRS 8	ID	11	9	16	2	13	20	6	0	16	16	2	3	2	2	12	17	8	5	15	6	23	2	2	8	
	AI	20	18	20	7	15	21	14	16	18	21	2	7	2	7	15	23	8	19	21	14	23	5	6	14	
IAS 33	ID	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	2	3	3	3	3	3	3	
	AI	3	3	3	3	3	3	3	4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
Total Disclosed Item		91	88	99	79	92	95	78	79	98	100	73	82	60	69	88	102	87	91	104	86	108	79	71	88	
Applicable Items		107	105	112	91	101	103	93	107	103	116	78	100	65	86	97	116	96	111	118	100	117	85	84	99	
Total Score for Firm		0.85	0.84	0.88	0.87	0.91	0.92	0.84	0.74	0.95	0.86	0.94	0.82	0.92	0.80	0.91	0.88	0.91	0.82	0.88	0.86	0.92	0.93	0.85	0.89	
<b>DCS<sub>2017</sub></b>		85%	84%	88%	87%	91%	92%	84%	84%	74%	95%	86%	94%	82%	92%	80%	91%	88%	91%	82%	88%	86%	92%	93%	85%	89%

$$DCS_{qr} = \frac{\text{Number of disclosed items}}{\text{TOTAL number of applicable items to the company}}$$

## Appendix E: PCS Results for 2015

ID: Items Disclosed	Compliance Score per company for 2015 based on Partial Compliance																							
	FIRM #																							
AI: Applicable Items	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
IAS1	42	41	41	42	40	41	42	41	44	40	40	39	42	41	42	42	41	43	42	41	43	42	40	40
AI	42	41	41	42	43	40	42	43	41	44	40	41	40	42	41	43	43	42	44	43	43	40	42	41
IAS2	4	4	4	4	3	4	1	5	4	5	0	5	0	1	4	4	4	4	4	5	3	3	5	
AI	4	4	4	4	3	4	3	6	4	6	0	6	0	3	4	4	4	4	4	4	6	6	3	
IAS7	11	12	12	11	13	12	11	13	12	11	10	11	10	13	10	13	10	13	12	12	12	12	12	
AI	13	14	14	13	14	14	14	14	13	15	14	13	11	13	12	15	12	15	16	15	14	13	13	
IAS16	4	5	6	5	4	4	5	4	4	5	4	7	3	9	0	3	5	7	4	4	5	6	8	
AI	4	5	6	5	4	4	5	4	4	10	3	9	0	4	5	7	4	4	4	6	6	9	5	
IAS18	3	2	4	2	4	4	1	0	4	0	3	2	1	1	2	3	3	4	4	2	3	2	3	
AI	3	4	4	2	4	4	1	4	4	3	3	1	3	3	3	4	4	4	4	3	4	2	3	
IAS21	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
AI	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
IAS23	2	0	2	1	2	0	2	1	2	0	1	1	1	0	1	0	1	0	1	1	2	1	0	
AI	2	0	2	2	2	0	2	2	2	0	2	2	0	2	0	2	0	2	0	2	2	2	0	
IAS24	7	7	8	5	5	4	6	8	10	8	8	4	5	3	5	3	6	8	6	6	7	7	3	
AI	9	7	10	9	10	11	8	9	12	8	9	11	7	9	7	8	8	8	8	8	8	8	8	
IAS36	0	1	1	0	2	2	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AI	0	2	2	0	2	2	0	2	2	4	0	2	0	0	0	0	0	0	0	0	0	0	0	
IAS37	4	2	3	3	0	2	0	2	4	0	3	0	0	0	2	4	2	4	2	3	4	2	3	
AI	4	2	3	3	0	2	0	2	4	0	3	0	0	0	2	4	2	4	2	3	4	2	3	
IFRS8	11	9	15	2	13	19	5	0	17	16	2	3	2	2	12	17	8	5	15	6	23	3	2	
AI	19	17	19	7	15	20	14	13	21	21	3	7	2	7	15	23	8	19	21	14	23	6	6	
IAS33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AI	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
# of standards	12																							
PCS <sub>gr</sub>	10.20	8.39	10.95	8.69	10.20	9.24	8.27	7.56	11.49	7.16	7.41	8.11	4.60	5.88	8.01	9.96	8.31	10.11	9.98	#####	#####	7.93	#####	9.05
PCS <sub>q</sub>	0.85	0.70	0.91	0.72	0.85	0.77	0.69	0.63	0.96	0.60	0.62	0.68	0.38	0.49	0.67	0.83	0.69	0.84	0.83	#####	#####	0.66	#####	0.75
PCS <sub>yr</sub>	70%	91%	72%	85%	77%	69%	63%	96%	60%	62%	68%	38%	49%	67%	83%	69%	84%	83%	88%	78%	66%	#####	75%	

$PCS_{gr} = \frac{\text{Level of compliance with EACH standards mandatory items}}{\text{TOTAL number of Standards applicable to the company}}$   
 $PCS_{q} = \frac{\text{Number of items disclosed (of standard x)}}{\text{Total number of items applicable (of Standard x)}}$   
 $PCS_{yr} = \frac{\text{TOTAL number of Standards applicable to the company}}{\text{TOTAL number of Standards applicable to the company}}$

## Appendix F: PCS Results for 2016

ID: Items Disclosed AI: Applicable Items		Compliance Score per company for 2016 based on Partial Compliance																									
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
IAS 1	FIRM #	42	41	41	42	42	40	42	41	41	43	40	40	39	42	41	43	42	41	43	42	41	43	40	40		
	AI	42	41	41	42	43	40	43	42	41	43	40	41	40	42	41	43	43	42	44	43	42	44	43	40		
		100%	1	1	1	0.977	1	0.98	1	1	1	0.98	0.98	1	1	1	0.977	0.976	0.977	0.98	0.98	1	0.952	0.98			
IAS2	ID	5	5	6	5	3	3	1	5	6	5	0	5	0	1	4	4	4	4	4	4	5	4	3	5		
	AI	6	6	6	6	3	3	3	6	6	6	0	6	0	3	4	5	4	6	6	4	3	6	3	6		
		0.8333	0.83	1	0.833	1	0.333	0.8	1	0.833	0.833	0	0.333	1	0.8	1	0.667	0.833	1	1	0.833	1	0.833	1	0.833		
IAS7	ID	11	11	13	12	13	13	12	12	11	13	12	11	10	11	11	13	10	13	14	13	13	12	12			
	AI	13	14	15	14	15	14	14	14	13	15	14	13	11	13	13	15	12	15	16	15	15	13	13			
		0.8462	0.79	0.867	0.857	0.929	0.86	0.9	0.8462	0.87	0.86	0.85	0.91	0.846	0.846	0.867	0.833	0.867	0.875	0.87	0.87	0.92	0.923	0.92			
IAS16	ID	4	4	5	5	4	4	5	4	4	7	3	9	0	3	6	8	4	5	5	5	8	4	3	4		
	AI	4	4	5	5	4	4	5	4	4	10	3	9	0	4	6	8	4	5	6	5	6	5	4	4		
		1	1	1	1	1	1	1	1	1	1	0.7	1	1	0	0.75	1	1	1	1	1	0.833	1	0.89	0.8	0.75	1
IAS18	ID	3	2	4	2	4	4	1	0	4	0	3	2	1	1	3	3	4	4	4	4	2	3	2	3	4	
	AI	3	4	4	3	4	4	1	4	4	3	3	3	1	3	3	3	4	4	4	4	3	4	2	3	4	
		1	0.5	1	0.667	1	1	1	0	1	0	1	0.67	1	0.333	1	1	1	1	1	1	1	0.67	0.75	1	1	1
IAS21	ID	1	1	1	1	2	2	1	1	1	2	1	1	0	1	1	2	2	3	2	1	1	1	2	1		
	AI	1	1	1	1	2	1	1	1	1	2	1	1	0	1	1	2	2	3	2	1	1	1	1	2	1	
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
IAS23	ID	2	0	2	2	2	0	2	1	0	0	1	1	0	1	1	1	0	1	1	1	2	1	0	2	0	
	AI	2	0	2	2	2	0	2	2	0	2	2	0	2	2	2	2	2	2	2	2	2	2	2	2	2	
		1	0	1	1	1	1	0.5	0	0	0.5	0.5	0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0	1	0
IAS24	ID	7	7	8	5	5	4	6	8	8	8	8	4	5	3	5	3	8	8	6	6	7	7	3	6		
	AI	9	7	10	9	10	10	8	9	10	8	9	11	8	8	7	8	10	8	8	8	8	8	7	8		
		0.7778	1	0.8	0.556	0.5	0.4	0.75	0.9	0.8	1	0.89	0.36	0.63	0.375	0.714	0.375	0.8	1	0.75	0.75	0.88	0.88	0.429	0.75		
IAS36	ID	0	0	1	0	2	2	0	1	2	0	0	0	0	0	2	2	2	2	2	2	2	0	2	2		
	AI	0	0	3	0	2	2	0	2	2	2	0	2	0	0	2	2	2	2	2	2	2	0	2	2		
		0	0	0.333	0	1	1	0	0.5	1	0	0	0	0	0	1	1	0	1	1	0	1	0	1	0.67		
IAS37	ID	3	2	3	3	0	2	0	0	2	4	0	3	0	0	2	4	2	3	4	2	0	3	0	3		
	AI	3	2	3	3	0	2	0	2	2	4	0	3	0	0	2	4	2	3	4	2	3	0	3	0		
		1	1	1	1	0	1	0	0	1	1	0	1	0	1	1	1	1	1	1	1	1	1	0	1	0	
IFRS 8	ID	11	9	16	2	13	20	6	0	17	16	2	3	2	2	12	17	8	5	15	6	23	2	2	8		
	AI	20	18	20	7	15	21	14	16	21	21	2	7	2	7	15	23	8	19	21	14	23	5	6	14		
		0.55	0.5	0.8	0.286	0.867	0.952	0.43	0	0.8095	0.76	1	0.43	1	0.286	0.8	0.739	1	0.263	0.714	0.43	1	0.4	0.333	0.57		
IAS33	ID	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
	AI	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3		
		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1		
#ofstandards		12																									
PCS-Q 2016		11.01	8.62	11.80	10.20	11.21	10.28	9.35	7.81	10.46	8.16	8.75	9.11	5.51	6.92	11.36	10.78	9.28	10.77	10.98	10.69	10.36	8.83	10.39	9.72		
		0.92	0.72	0.98	0.85	0.93	0.86	0.78	0.65	0.87	0.68	0.73	0.76	0.46	0.58	0.95	0.90	0.77	0.90	0.92	0.89	0.86	0.74	0.87	0.81		
		92%	72%	98%	85%	93%	86%	78%	65%	87%	68%	73%	76%	46%	58%	95%	90%	77%	90%	92%	89%	86%	74%	87%	81%		

$$PCS_{qr} = \frac{\text{Level of compliance with EACH standards mandatory items}}{\text{TOTAL number of Standards applicable to the company}}$$

$$PCS_{qr} = \frac{\text{Number of items disclosed (of standard x)}}{\text{TOTAL number of Standards applicable to the company}}$$

## Appendix G: PCS Results for 2017

ID: Items Disclosed		Compliance Score per company for 2017 based on Partial Compliance																										
AI: Applicable Items		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
IAS 1	AI	1	0.977	1	1	0.977	1	0.98	0.98	1	1	0.98	1	1	1	1	0.976	0.98	0.98	1	0.98	1	1	0.976	0.98			
IAS 2	AI	5	5	6	4	3	3	1	5	6	6	0	5	0	1	4	4	5	4	5	4	4	4	4	3	5		
IAS 7	AI	0.833	0.833	1	1	1	0.33	0.83	1	0.86	0	0.8	0	0.3	0.8	1	0.833	0.67	0.83	1	1	1	1	1	0.833			
IAS 16	AI	10	11	11	12	13	12	13	12	13	12	11	10	11	11	13	10	13	14	13	14	12	12	12	12			
IAS 18	AI	12	13	14	13	14	14	15	14	15	14	13	11	13	13	15	12	15	16	15	16	13	13	13	13			
IAS 21	AI	0.833	0.846	0.79	0.85	0.857	0.93	0.86	0.87	0.857	0.87	0.86	0.8	0.9	0.8	0.85	0.867	0.833	0.87	0.88	0.867	0.88	0.923	0.9	0.923			
IAS 23	AI	4	4	5	4	4	4	4	4	4	4	8	3	9	0	4	5	7	4	4	5	5	8	4	3	4		
IAS 24	AI	4	4	5	4	4	4	4	4	4	4	11	3	9	0	4	5	7	4	4	4	6	6	9	5	4	4	
IAS 36	AI	1	1	1	1	1	1	1	1	1	1	0.73	1	1	0	1	1	1	1	1	1	1	0.83	0.833	0.89	0.8	0.8	
IAS 37	AI	3	2	4	3	4	4	1	0	4	0	3	2	1	1	3	3	4	4	4	4	2	3	2	3	4		
IFRS 8	AI	3	4	4	3	4	4	1	4	3	3	3	3	3	3	3	3	4	4	4	4	3	4	2	3	4		
IAS 33	AI	1	0.5	1	1	1	1	1	0	1	0	1	0	1	0.7	1	0.3	1	1	1	1	1	1	1	0.667	0.75	1	1
IAS 36	AI	1	1	1	1	2	2	1	1	1	1	2	1	1	0	1	1	2	2	3	2	1	1	2	1	1	2	1
IAS 37	AI	1	1	1	1	2	2	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1
IFRS 8	AI	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
IAS 33	AI	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
# of standa		1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10.82		10.43	11.75	8.76	11.26	9.28	9.35	8.43	10.63	8.21	8.72	9.14	5.51	7.17	10.16	10.98	9.11	10.77	10.98	10.55	10.37	9.00	7.89	10.05				
0.90		0.87	0.98	0.73	0.94	0.77	0.78	0.70	0.89	0.68	0.73	0.76	0.46	0.60	0.85	0.92	0.76	0.90	0.92	0.88	0.86	0.75	0.66	0.84				
90%		87%	98%	73%	94%	77%	78%	70%	89%	68%	73%	76%	46%	60%	85%	92%	76%	90%	92%	88%	86%	75%	66%	84%				

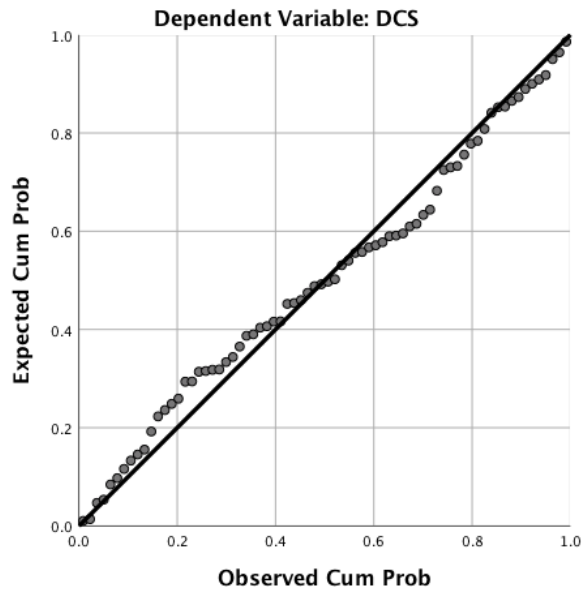
$$PCS_{qr} = \frac{\text{Level of compliance with EACH standards mandatory items}}{\text{TOTAL number of Standards applicable to the company}}$$

$$PCS_{qr} = \frac{\text{Number of items disclosed (of standard x)}}{\text{Total number of items applicable (of Standard x)}}$$

$$PCS_{qr} = \frac{\text{TOTAL number of Standards applicable to the company}}{\text{TOTAL number of Standards applicable to the company}}$$

## Appendix H: P-P Plots for DCS and PCS

Normal P-P Plot of Regression Standardized Residual



Normal P-P Plot of Regression Standardized Residual

